

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

POLAROID CORPORATION)
)
Plaintiff,)
)
v.) C.A. No. 06-738 (SLR)
)
HEWLETT-PACKARD COMPANY,) **REDACTED –**
)
Defendant.) **PUBLIC VERSION**

POLAROID'S ANSWERING BRIEF IN OPPOSITION TO DEFENDANT HEWLETT-PACKARD'S MOTION TO PRECLUDE THE REPORT AND TESTIMONY OF POLAROID'S SURVEY EXPERT WALTER MCCULLOUGH

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NATURE AND STAGE OF PROCEEDINGS

On May 23, 2008, Hewlett Packard (HP) filed *Defendant Hewlett-Packard's Memorandum In Support Of Motion To Preclude The Report And Testimony of Polaroid's Survey Expert Walter McCullough.* (D.I. 165). This is Polaroid's answering brief in opposition to that motion.

SUMMARY OF ARGUMENT

HP asserts that the opinions of Mr. Walter McCullough are not relevant or reliable. Specifically, HP argues that Mr. McCullough's printer surveys (the "Surveys") are not relevant because they allegedly do not support the analysis submitted by Polaroid's damages expert, Dr. Allyn D. Strickland. D.I. 165 at 3, 9-10. Dr. Strickland, however, relied on the Surveys in connection with his analysis of *Georgia-Pacific* factor no. 8. HP also argues that the Surveys are not relevant because Dr. Strickland only mentions the Surveys once in his report. *Id.* at 3. Frequency of citation, however, is not, nor has it ever been, a test for relevancy.

HP also argues that the Surveys fail to comply with generally accepted survey standards because they allegedly were biased and asked respondents to guess. *Id.* at 1. However, none of the survey questions suggested a particular response, therefore, the Surveys were not biased. And, the survey questions asked respondents to estimate the value of the infringing feature — not to guess — based on the information provided and the assessments and needs of the respondents. McCullough Dep. at 135:12-136:24, 169:4-170:2, attached hereto as Exhibit 1. There is no reason to believe that the respondents could not do so intelligently. *Id.* at 169:4-170:2. Furthermore, the Surveys followed the guidelines of the Reference Guide on Survey Research. *Id.* at 124:19-159:17. The fact that HP disagrees with the Survey results and that it may have asked different survey questions is not a basis to preclude Mr. McCullough's opinions

under the standards of *Daubert*. At most, HP raises issues that can and should be addressed during the cross examination of Mr. McCullough at trial.

STATEMENT OF FACTS

Mr. Walter McCullough is a survey expert who has conducted thousands of surveys in the 40 years he has worked in the survey research field. *Id.* at 57:18-20; 27:12-28:9; 29:13-24; 94:10-24; McCullough Dec. at ¶6, attached hereto as Exhibit 2. Some of those surveys have sought to determine the value consumers place on a particular product, as he was asked to do in this matter. Ex. 1, McCullough Dep. at 94:2-9; Ex. 2, McCullough Dec. at ¶6. Hundreds of the surveys Mr. McCullough has conducted have been for litigation purposes, and courts have regularly accepted his opinions. Ex. 1, McCullough Dep. at 57:21-23; Ex. 2, McCullough Dec. at ¶6. *See, e.g. Westchester Media Co. v. PRL USA Holdings, Inc.*, 103 F.Supp.2d 935, 968 (S.D. Tex. 1999) (“Because of the many concerns raised by Dr. Cogan’s survey procedure, this court credits instead the findings in Mr. McCullough’s survey evidence, which shows a confusion rate of 31%.”); *Anheuser-Busch, Inc. v. Caught-on-Bleu, Inc.*, 288 F.Supp.2d 105, 127 (D.N.H. 2003) (where court found that “McCullough’s study constitutes undisputed circumstantial proof of actual confusion”); *Paco Sport, Ltd. v. Paco Rabanne Parfums*, 86 F.Supp.2d 305, 323 (S.D.N.Y. 2000) (“In contrast to the Weiss survey, the McCullough survey’s universe does not suffer from the flaws described above and is consistent with the established requirements.”) Although there are some courts that have opted to not rely upon his opinions, Mr. McCullough does not believe that he has ever been disqualified nor that his surveys or opinions were ever stricken. Ex. 1, McCullough Dep. at 68:12-21.

Mr. McCullough was retained to determine the extent to which consumers valued the Adaptive Lighting feature — the feature which is at issue in this lawsuit. Ex. 1, McCullough Dep. at 6:4-7:11, 11:3-11:8, 87:5-10; 88:6-25, 89:12-15; D.I. 166 at Ex. A (McCullough Report)

at 3. Initially, Mr. McCullough was asked to survey an HP camera, the Photosmart C6180 All-in-One printer, and the Officejet 5610 All-in-One printer, which are examples of HP products that have the Adaptive Lighting feature. Ex. 1, McCullough Dep. at 6:23-7:11, 11:3-11:8, 42:21-43:13. But subsequently, Polaroid opted to not go forward with the camera survey. *Id.* at 14:14-19, 22:11-23:14. Polaroid did not ask for or receive the camera questionnaire responses prior to the submission of Mr. McCullough's report. *Id.* at 21:9-25.

Mr. McCullough conducted the initial phase of the survey of the Photosmart C6180 printer and the HP camera in January 2008. *Id.* at 45:22-47:7, D.I. 166 at Ex. A (McCullough Report) at Ex. B at 3; *see also* Ex. 1, McCullough Dep. at 14:25-15:5. Although the surveys of those products were conducted simultaneously, they were completely separate surveys and not part of the same survey as HP suggests. Ex. 1, McCullough Dep. at 16:4-13; 17:25-18:18; Ex. 2 McCullough Dec. at ¶5; D.I. 165 at 5 n. 3. Mr. McCullough did not have the camera survey "in [] mind" as he went forward with the two printer surveys. Ex. 1, McCullough Dep. at 16:4-13. Mr. McCullough did not go to the mall to conduct or witness the survey taking place. *Id.* at 114:2-7. Nor were the results for the camera survey "in mind" (or even a "conscious awareness") as Mr. McCullough wrote the report on the printer surveys because the results of the camera survey had nothing to do with the printer surveys. *Id.* at 17:9-18:18. Mr. McCullough did not compare the results of the camera survey with the results of the printer surveys. *Id.* at 44:3-13.

The results of the Surveys showed that consumers believed, on the average, that the Adaptive Lighting feature was worth approximately \$50.00 per printer in the HP Photosmart C6180 printer and about \$20.00 in the HP Officejet 5610 printer. D.I. 166 at Ex. A (McCullough Report) at 8.

HP submitted a rebuttal report and its own survey from Dr. Jacob Jacoby. *See* D.I. 166 at Ex. B (Jacoby Rebuttal); Jacoby Report, excerpts attached hereto as Exhibit 3. Dr. Jacoby defined his survey as a behavioral study and stated that this was the first time he had ever looked at the behavior of individuals to determine the information to which they pay attention. Jacoby Dep. at 7:25-9:4, excerpts attached hereto as Exhibit 4.

Although Dr. Jacoby's opinions have been praised by some courts, other courts have criticized his opinions. *Kargo Global, Inc. v. Advance Magazine Publishers, Inc.*, No. 06 CIV. 550, 2007 WL 2258688, at * 12 (S.D.N.Y. Aug. 6, 2007) (finding that Rule 403 was clearly warranted because “[t]he live testimony of Kargo's highly seasoned and impressively credentialed consumer confusion expert, regarding the results of the deeply flawed Jacoby Survey, would prove to be ‘both powerful and quite misleading’”); *Smith v. Wal-Mart Stores, Inc.*, 537 F.Supp.2d 1302, 1334 (N.D. Ga. 2008) (“Jacoby surveyed an overbroad universe, failed to adequately replicate the shopping experience and asked leading questions. He also surveyed a non-random sample that in any case was too small to allow the results to be projected upon the general market. Thus, the Court finds that the Jacoby survey is so flawed that it does not establish a genuine issue of material fact with regard to actual confusion, much less prove actual confusion.”); *Weight Watchers Int'l, Inc. v. Stouffer Corp.*, 744 F.Supp. 1259, 1272 (S.D.N.Y. 1990) (finding that Dr. Jacoby failed to identify the proper universe); *Leelanau Wine Cellars, Ltd. v. Black & Red, Inc.*, 502 F.3d 504, 518 (6th Cir. 2007) (finding that Dr. Jacoby had identified an overbroad universe and declining to follow his opinions).

ARGUMENT

The Supreme Court has “assign[ed] to the trial judge the task of ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 597 (1993); *see also Izumi Prods. Co. v. Koninklijke Philips Elecs. N.V.*, 315 F. Supp.2d 589, 600 (D. Del. 2004). The Third Circuit has interpreted Rule 702 to include “three distinct substantive restrictions on the admission of expert testimony: qualifications, reliability, and fit.” *Id.* at 600 (quoting *Elcock v. Kmart Corp.*, 233 F.3d 734, 741 (3d. Cir. 2000)). An expert’s opinion is considered to be reliable if it is based on valid scientific knowledge. *Daubert*, 509 U.S. at 589–90. There needs to be a “valid scientific connection to the pertinent inquiry as a precondition to admissibility.” *Id.* at 591-92. “This standard, nevertheless, is not intended to be a high one or to be applied in a manner that requires the plaintiffs ‘to prove their case twice — they do not have to demonstrate to the judge by a preponderance of the evidence that the assessments of the expert are correct, they only have to demonstrate by a preponderance of the evidence that their opinions are reliable.’” *Izumi Prods. Co.*, 315 F. Supp.2d at 601 (citing *Oddi v. Ford Motor Co.*, 234 F.3d 136, 145 (3d Cir. 2000) (citing *In re Paoli Railroad Yard PCB Litigation*, 35 F.3d 717, 744 (3d Cir. 1994)).

As the survey experts in this case agreed, the Reference Guide on Survey Research, which is a chapter from the *Reference Manual on Scientific Evidence*, provided by the Federal Judicial Center, is a basic guideline for putting together surveys. *Reference Manual on Scientific Evidence* at 229 (2d ed. 2000); *see also* Ex. 1, McCullough Dep. 124:19-125:15; D.I. 166 Ex. B (Jacoby Rebuttal Report) at 3-4; *see also* D.I. 166 at Ex. G.

A. MR. McCULLOUGH’S OPINIONS ARE RELEVANT — OR “FIT” IN THIS CASE.

HP says that the Surveys are not relevant in this case because they do not support Polaroid’s damages theory. D.I. 165 at § 2(A). [REDACTED]

[REDACTED] Strickland's Report at ¶ 118, attached hereto as Exhibit 5. And certainly, survey results of the infringing feature are relevant to at least factor no. 8 of the *Georgia Pacific* factors: “[t]he established profitability of the product made under the patent; its commercial success; and its current popularity.” *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F.Supp. 1116, 1120 (D.C.N.Y. 1970). Respondents were asked to place a value on the Adaptive Lighting feature as consumers, and the results of the Surveys provide information about the popularity of the feature and its commercial success.¹ D.I. 166 at Ex. A (McCullough Report) at Ex. A (Main Questionnaire); *see also Tivo, Inc. v. Echostar Comm. Corp.*, Case No. 2:04-CV-1-DF, 2006 WL 5127620, at *3-4 (E.D. Tex. Jan. 26, 2006) (denying Echostar's motion to preclude Tivo's survey expert and accepting Tivo's argument that courts are allowed “a fair amount of temporal leeway in their analysis of the hypothetical negotiation” where Tivo used the survey results in connection with *Georgia-Pacific* factors nos. 6, 8, 10, 11, 14, and 15).

[REDACTED]

[REDACTED]

[REDACTED]

¹ [REDACTED] (Ex. 5, Dr. Strickland's Report at pages 59-63), [REDACTED]

[REDACTED]
[REDACTED] *Id.* at ¶¶ 138, 143.

[REDACTED]² By no means does this make Mr. McCullough's survey results irrelevant or unreliable.

Tellingly, the results of HP's own survey expert, Dr. Jacoby, were not even *reviewed* by HP's damages expert. *See* Wallace Report at 1-2 and App. C, excerpts attached hereto as Exhibit 6. This indicates that surveys geared towards showing how consumers perceive the Adaptive Lighting feature are independently relevant even if not cited by and relied upon by a party's damages expert. *See e.g., Winner Intern. Royalty Corp. v. Wang*, 202 F.3d 1340, 1350-51 (Fed. Cir. 2000) (in analyzing commercial success of the patented feature, the district court did not err in finding that a survey showed the nexus between the patented features and the reasons consumers bought the products).

The cases HP cites in support of the theory that the McCullough Surveys are not relevant are not even patent infringement cases, and the courts excluded the surveys at issue there based on serious flaws. *Starter Corp. v. Converse Inc.*, 170 F.3d 286, 296-97 (2d Cir. 1999) (trademark case where Starter's survey evidence was excluded because it was found to be "little more than a memory test, testing the ability of the participants to remember the names of the shoes they had just been shown and gave no indication of whether there was a likelihood of confusion in the marketplace"); *C.A. May Marine Supply Co. v. Brunswick Corp.*, 649 F.2d 1049, 1052 (5th Cir. 1981) (wrongful dealership termination case where court excluded a

² [REDACTED]

[REDACTED] *See* Ex. 5, Strickland Report *generally*. Dr. Strickland applied the *Georgia-Pacific* factors in arriving at his opinion. His damages figures were not "derived from speculative assumptions," and notably, Dr. Strickland's Report is not the subject of this motion or of any other motion to preclude raised by HP.

customer survey because “customer opinion on the merits of the termination was irrelevant” and would not be useful to calculate lost future profits as May Marine contended).

B. MR. McCULLOUGH’S METHODOLOGY WAS RELIABLE

HP also asserts that the methodology employed by Mr. McCullough in this case was not reliable. D.I. 165 at Argument §§ 2(B) and 2(C).

1. The Survey Questions Are Not Biased And Misleading.

HP asserts that the Surveys were biased and misleading. *Id.* at § 2(B). Specifically, HP claims that Mr. McCullough’s Surveys were not objective because 1) consumers were only asked to value the Adaptive Lighting feature, 2) the description of the Adaptive Lighting feature was “laudatory,” and 3) the manner in which Mr. McCullough asked respondents to provide a dollar amount for the feature was allegedly misleading. *Id.*

Surveys must be objective. Mr. McCullough maintained objectivity through his survey questions. Mr. McCullough ensured objectivity by using stimulus information that is available from HP’s own website, asking non-leading questions, and relying on answers from respondents that were mainly volunteered. Ex. 1, McCullough Dep. at 128:2-23. The survey questions were not leading because they did not suggest a particular answer, and therefore, the respondents were able to answer based on their own beliefs. *Id.* at 128:24-129:12.

(a) Mr. McCullough Did Not Suggest An Answer By Focusing Only On The Adaptive Lighting Feature.

First, HP complains that even though Mr. McCullough handed out the HP fact sheet for the surveyed printer showing many attributes, he did not ask the consumers to place any value on any attribute other than the Adaptive Lighting feature. D.I. 165 at 11-12. HP asserts that the focus on this one feature communicated to respondents that they should view this particular feature as valuable. *Id.* at 12. But as HP admits, Mr. McCullough did inform consumers through

the fact sheet that the printers have many attributes. *Id.* at 11; Ex. 1, McCullough Dep. at 111:17-24. Respondents did not know that Mr. McCullough would only ask about Adaptive Lighting — that is, respondents did not know at the time that they were asked to value the Adaptive Lighting feature that they would not be asked to do the same for other features of the printer. Therefore, there is no suggestion in the survey questions that Adaptive Lighting has great value. Specifically, respondents were first told:

I'd like you to look at this description of a color ink jet printer and review the information as if you were considering whether or not to buy it. After you have reviewed the product description, I will ask you a few questions. If you don't know the answer to any of my questions, please don't hesitate to say that.

D.I. 166 at Ex. A (McCullough Report) at Ex. A (Main Questionnaire) at 1. Respondents were then handed the fact sheet and allowed time to review the facts before more questions were asked. *Id.* The respondents were provided a description of the Adaptive Lighting feature and then asked if this printer “contained all of the features of the printer whose description I just showed you, but it did not have the Adaptive Lighting Technology” would that printer cost less or the same. *Id.* (emphasis in original). The fact sheets made it clear that the printer had other attributes, and the respondents were free to decide on their own whether the printer would cost the same or less without the Adaptive Lighting feature (or to say they did not know). *Id.* There was no indication to the respondents that they would not be asked similar questions about other features. Ex. 2, McCullough Dec. ¶10. Therefore, the survey questions did not suggest any specific answers from the respondents. *Id.* Asking about the remaining attributes was unnecessary because they are not at issue in this case. *Id.* Furthermore, it would be overwhelming and unreasonable to ask a consumer to place a value on each of the twenty or so attributes (or some portion thereof), and doing so is meaningless since the objective of the survey was to determine the consumers' perceived value of the patented feature — not to figure out the

value of each feature. *Id.*; Ex. 1, McCullough Dep. at 107:19-108:7; 166 at Ex. A (McCullough Report) at Ex. C.

(b) The Definition of The Adaptive Lighting Feature Provided By Mr. McCullough Did Not Suggest That It Was Valuable.

Second, HP complains that the description of the Adaptive Lighting feature Mr. McCullough provided misled respondents into thinking this feature was valuable. D.I. 165 at 12-13. The description Mr. McCullough provided was:

This particular color ink jet contains a feature called “Adaptive Lighting Technology.” Adaptive Lighting Technology is a breakthrough technology that enables printers to produce photos that look more like what people see with their own eyes. It accomplishes this by balancing relationships between bright and dark areas in a photo, preserving gentle contrasts by smoothing out harsh contrasts.

D.I. 166 at Ex. A (McCullough Report) at 6. HP claims that Mr. McCullough crafted this definition through “different websites” and used words (such as “breakthrough technology,” “enables,” “what people see with their own eyes,” “accomplishes,” “preserving gentle contrasts by smoothing out harsh contrasts”) that made the feature appear valuable. D.I. 165 at 12-13. HP further complains that Mr. McCullough should have let respondents know that this feature has “limited use.” *Id.* at 12.

HP’s website offers numerous definitions of Adaptive Lighting: *See e.g.* POL 7522306; POL 7539353; POL 7522307-13; P L 7539345-352; http://h10025.www1.hp.com/ewfrf/wc/genericDocument?docname=c01066451&cc=us&dlc=en&lc=en&jumpid=reg_R1002_USEN; http://h41257.www4.hp.com/cda/hpec/display/main/hpec_content.jsp?zn=hho&cp=2-705-706-712%5E19166_4022_19 Attached hereto as Group Exhibit 7. The fact sheets for the two different printers do not contain a definition for Adaptive Lighting. D.I. 166 at Ex. A (McCullough Report) at Ex. C. All of the definitions generally show that

Adaptive Lighting is an image enhancing feature to fix lighting in pictures. *Id.*

Mr. McCullough developed the definition he used from different pages of HP's own website and not from random places on the Internet as HP's motion suggests. Ex. 1, McCullough Dep. at 147:16-150:25; Ex. 2, McCullough Dec. at ¶8; D.I. 165 at 12-13. The main portion of the definition comes from a page on HP's website that incorporates most of the very words HP complains about and deems suggestive:

HP Adaptive Lighting Technology is a **breakthrough technology** that permits digital cameras to produce photos that look more like **what we see with our own eyes**. It balances brightness relationships between bright and dark areas in a photo, **preserving gentle contrasts** but compressing harsh contrasts.

Ex. 7, POL 7522306 (emphases added). Another page from HP's website shows the exact wording Mr. McCullough used for the last phrase of the description: “**preserving gentle contrasts by smoothing out harsh contrasts**.” *Id.* at POL 7539353 (emphasis added).

Mr. McCullough only made a few adjustments beyond these two pages. First, he replaced “permits digital cameras” with the phrase “enables printers” because the Surveys focused on printers and not cameras. “Enable” means ”to make possible” and “permit” means “to afford possibility” or “allow.” WEBSTER’S II NEW COLLEGE DICTIONARY 370, 819 (1999 ed.). While “enable” and “permit” do not mean the exact same thing, they are arguably similar terms — one no more suggestive than the other. Second, Mr. McCullough slightly changed the words of the second sentence to read, “It accomplishes this by balancing relationships,” rather than HP’s words, “It balances relationships,” which inherently would mean that the balancing is “accomplished” in this manner. Again, there is nothing suggestive or complimentary about this minor change. The only other change made was from “we” to “people.” Therefore, Mr. McCullough either used HP’s own words or made slight neutral adjustments. The definition Mr. McCullough used did not suggest any value. The goal was to articulate a generalized description

since this infringing feature is available in a significant number of both cameras and printers. Ex. 2, McCullough Dec. ¶8. There would be no benefit to limiting the definition to one used for the specific printers that were surveyed since the infringing feature is in many different HP cameras and printers. *Id.* Mr. McCullough wanted to use a “constructive, cohesive” definition that “consumers would understand.” *See* Ex. 1, McCullough Dep. at 150:10-25.

HP further complains that the definition Mr. McCullough used did not show that the Adaptive Lighting feature has “limited use.” D.I. 165 at 12. But on HP’s website, it says only that there are a “few types” of scenes for which Adaptive Lighting “may” not be desirable: when one wants a dramatic contrast such as a silhouette, and low contrast scenes such as “delicate outlines of objects in a fog bank.” Ex. 7, POL 7522309. HP claims that the infringing feature is “usually” turned off in “many” models (D.I. 165 at 2), but that suggests this feature is *sometimes* turned on in those models, and that there are other models embodying the infringing feature where the feature is indeed turned on. In any event, even if the feature is turned off, the feature can certainly be turned on. Whether the product comes with the feature turned on or off and the few instances where purchasers may not want to use this feature do not suggest that the feature has “limited use” as HP claims.³

(c) The Questions In The Surveys Did Not Suggest A Higher Value.

Next, HP complains that the survey questions misled respondents to place a higher value on the Adaptive Lighting feature first, because respondents were not asked to value the feature

³ Interestingly, HP cites Dr. Jacoby’s Rebuttal Report to also claim that “when this feature is turned on, it evaluates an image to determine whether to apply the accused algorithm and in a minority of instances will apply the algorithm.” D.I. 165 at 2 citing Jacoby Rebuttal Report at 8. Certainly Dr. Jacoby does not hold himself out to be an expert in algorithms, and there is no evidence, in Dr. Jacoby’s Rebuttal Report or elsewhere in this case, that actually quantifies how often the accused algorithm is used.

keeping the other features in mind (*i.e.* respondents had no frame of reference), and second, because the respondents who answered that they did not know the value of the feature were provided with a card that showed a series of ranges of prices from which to select. D.I. 165 at 13-14.

Again, as mentioned above, it would have been overwhelming, and unnecessary, to ask respondents about the value of the other features. Ex. 1, McCullough Dep. at 107:19-108:7; Ex. 2, McCullough Dec. at ¶10. Notably, Mr. McCullough did not hide the fact that the printers had other attributes; as HP admits, he provided respondents with fact sheets about the printers which listed the other attributes. *Id.* at 111:17-24.

Respondents who said they did not know how much less the printer would be without the Adaptive Lighting feature were provided with a card showing various price ranges for them to select from. D.I. 166 Ex. A (McCullough Report) at Ex. A (Main Questionnaire) at M2. HP believes that the potential choices were misleading because the scale communicated a high value. D.I. 165 at 14. First, as shown above, the first question of the survey made it clear that the respondent could answer “don’t know” at any time. D.I. 166 Ex. A (McCullough Report) at Ex. A (Main Questionnaire) at M1; Ex. 1, McCullough Dep. at 145:24-146:15. Next, there is no evidence to support HP’s inference that the Adaptive Lighting feature only cost a few cents. In fact, during discovery, Polaroid sought cost figures from HP but HP refused to produce that information. *See e.g.* Polaroid’s First Set of Document Requests at No. 6; 10/22/07 Holohan Ltr. to Coburn; 10/30/07 Coburn Ltr. to Holohan, attached hereto as Group Exhibit 8. In any event, Mr. McCullough was not trying to measure the actual cost of the Adaptive Lighting feature. Ex. 1, McCullough Dep. at 140:18-141:3; Ex. 2, McCullough Dec. ¶¶4, 7, 10,13.

Furthermore, it was appropriate for Mr. McCullough to offer a closed-ended choice once a respondent was unable to decide how much less the printer would be without the Adaptive Lighting feature. Ex. 2, McCullough Dec. at ¶11. Every experienced survey researcher knows that some respondents are reluctant to answer an open-ended question and would prefer a list of choices. *Id.* at ¶11; Ex. 1, McCullough Dep. at 138:8-139:8. Moreover, the range provided by Mr. McCullough, if anything, suggested numbers too low since the median for the Photosmart C6180 was \$50.00 and \$20.00 for the Officejet 5610 printer, and the highest range respondents could choose from for either printer was “\$20.00 or more.” D.I. 166 at Ex. A (McCullough Report) at Ex. C; Ex. 1, McCullough Dep. at 139:9-140:17; McCullough Dec. ¶11.

This is not an instance where only a closed-set of responses were provided and the choices did not provide a full range of options. *See American Home Products Corp. v. Johnson & Johnson*, 654 F. Supp. 568, 581-82 (S.D.N.Y. 1987) (where the court found the survey unreliable where the “list of choices was incomplete, inexplicably omitting to include, as one of its options, the literal meaning of the advertisement!” and “the list of choices were seriously slanted in another way: among the four positive choices, the latter two were so obviously false that they could almost as well have been omitted”). Respondents in this case were only asked the closed-ended question with a full range of potential options if they decided the printer cost less without the Adaptive Lighting feature, but they did not know what value to place on it. Ex. 1, McCullough Dep. at 138:8-139:8; Ex. 2, McCullough Dec. at ¶ 11. Moreover, even if Mr. McCullough, instead, did not include any answers to his closed-ended questions, it would have very little impact on the results. Specifically, the survey results would show that the medians of \$50.00 and \$20.00 would not change at all, and the means would actually increase to \$55.96 and \$24.89. Ex. __, McCullough Dec. ¶12; *see Johnson & Johnson-Merck Consumer Pharm. Co. v.*

Rhone-Poulenc Rorer Pharms., Inc., 19 F.3d 125, 134-35 (3d Cir. 1994) (where court affirmed refusal to consider survey questions that were leading but agreed to credit the answers to the non-leading questions).

2. Mr. McCullough's Surveys Did Not Cause Respondents To Guess.

HP also accuses Mr. McCullough's Surveys of directing respondents to make guesses. Specifically, HP claims that 1) Mr. McCullough did not properly choose respondents based on their skill in valuing printer features; 2) Mr. McCullough did not ask a logical question to determine how consumers value the Adaptive Lighting feature; 3) Mr. McCullough failed to use a filter question asking potential respondents if they felt qualified to make such estimates; 4) Mr. McCullough's Surveys forced respondents to answer after they said they did not know the value of the printer without the Adaptive Lighting feature; and 5) because the Surveys called for guessing, Mr. McCullough's Surveys "led to preposterous results." D.I. 165 at 16-18.

Mr. McCullough did not ask respondents to guess. The survey questions asked respondents to estimate based on their own assessment of the value of the feature to them — not to guess — in the context of the information provided and their own experience and needs. Ex. 1, McCullough Dep. at 135:12-136:24, 169:4-170:2. There is no reason to believe that respondents could not do so intelligently. *Id.*

(a) Mr. McCullough Used A Proper Set of Respondents.

HP criticizes Mr. McCullough for failing to seek out skilled respondents to value the Adaptive Lighting feature. D.I. 165 at 15-16. But this was not intended to be a survey among experts, nor a survey "of randomly selected retail shoppers." D.I. 165 at 16; Ex. 2, McCullough Dec. at ¶7. Mr. McCullough's respondents were people who had purchased a color inkjet printer in the past year or who thought they might buy one in the next year. D.I. 166 at Ex. A (McCullough Report) at Ex. A (screener questionnaire) at S2; Ex. 1, McCullough Dep. at 130:4-

10; Ex. 2, McCullough Dec. ¶7. These respondents were selected from a representative pool of consumers who mirrored the gender and age makeup reflective of the population as determined by the US Census Bureau. Ex. 1, McCullough Dep. at 118:13-119:21; Ex. 2, McCullough Dec. at ¶7; D.I. 166 at Ex. A (McCullough Report) at 5. Notably, Dr. Jacoby used the exact same universe in his survey. Ex. 3, Dr. Jacoby Report at 7.

Because the Surveys were focused on consumer perception of the value of the feature and not on estimating manufacturing or wholesale cost, there was no reason to have greater skills or knowledge as a respondent. Ex. 2, McCullough Dec. ¶7.

(b) Mr. McCullough Asked Respondents A Logical Question To Determine The Value Consumers Place On The Adaptive Lighting Feature.

HP says that Mr. McCullough should have framed the operative question as “How much are you willing to pay for such a feature” instead of the question asked: “About how much less do you think the model without the Adaptive Lighting feature would cost?” D.I. 165 at 16. As Mr. McCullough explained in his deposition, because there already exists a printer (or printers) with the Adaptive Lighting feature, it only makes sense to introduce the product with the feature and to ask then how much the unit would cost without it. Ex. 1, McCullough Dep. at 98:15-99:18. Because the question Mr. McCullough did ask was reasonable and logical, it does not matter that HP’s expert would have chosen to ask different questions.

(c) A Filter Question Would Not Have Made Sense Here.

HP claims Mr. McCullough should have at least used a filter question to weed out any respondents who did not feel qualified or capable to place a value on the Adaptive Lighting feature. D.I. 165 at 16. Again, respondents were permitted to say “Don’t Know” to any question in the Surveys. D.I. 166 at Ex. A (McCullough Report) at Ex. A (Main Questionnaire) at M1. Given that choice, a filter question was not needed here, particularly because the Surveys were

attempting to measure consumer perceived value and not actual cost. Ex. 1, McCullough Dep. at 107:19-108:7, 135:2-11, 137:5-24; Ex. 2, McCullough Dec. ¶7.

(d) Respondents Were Not Forced To Answer.

HP contends that by asking respondents who said they did not know how much less the printer would be without the Adaptive Lighting feature to pick from a range of prices, Mr. McCullough encouraged guessing. D.I. 165 at 16-17. Again, even once the respondents were given pricing options, they could still say they did not know the answers to any question in the survey. D.I. 166 at Ex. A (McCullough Report) at Ex. A (Main Questionnaire) at M1; Ex. 2, McCullough Dec. ¶11. And even if Mr. McCullough, instead, did not include any of the answers where a pricing range was selected, it would have very little impact on the results. Specifically, the survey results would show that the medians of \$50.00 and \$20.00 would not change at all, and the means would actually increase to \$55.96 and \$24.89. Ex. 2, McCullough Dec. ¶12.

(e) Outlandish Responses To The Surveys Were Not Included In The Results.

HP points out that some of the responses in the Surveys were unreasonable. D.I. 165 at 17-18. In virtually all surveys, there are some respondents who either do not understand the task at hand or who provide unreasonable answers for some unknown reason. Ex. 2, McCullough Dec. ¶14. Survey experts, such as Mr. McCullough, take this fact into account by excluding the outlandish responses from the calculation of the means and median values. *Id.*; *see e.g.* Ex. 1, McCullough Dep. at 100:23-103:22. For instance, in the Officejet 5610 printer survey, two respondents said the Adaptive Lighting feature was worth \$200 even though the price of the printer was only \$99.99. D.I. 166 at Ex. A (McCullough Report) at Ex. E (second to last page of Officejet 5610 verbatim response chart). Naturally, Mr. McCullough excluded those results from his calculations, as he did with other unreasonable responses. *Id.* (last page of Photosmart C6180 verbatim response chart and last two pages of Officejet 5610 verbatim response chart

where it is indicated which responses are not included in the mean/median); Ex. 2 McCullough Dec. ¶ 14; *see also* Ex. 1, McCullough Dep. at 100:23-103:22. And to further minimize the influence of some particularly high values, Mr. McCullough calculated the median value (*i.e.* the middle most value) together with the mean. Ex. 2, McCullough Dec. ¶14. Some survey experts may have chosen to exclude more or less responses, but regardless, this would not alter the underlying fact that consumers believe that Adaptive Lighting has significant value. *Id.*⁴

C. MR. MCCULLOUGH IS A QUALIFIED SURVEY EXPERT.

While HP does not specifically claim that Mr. McCullough is unqualified, it nevertheless focuses on times in which Mr. McCullough's opinions were not used by a court, points to the fact that Mr. McCullough has not written an academic paper or taught at a university,⁵ and (wrongly) notes that Mr. McCullough has never done a consumer perception survey before. D.I. 165 at 3-6. At the same time, HP touts its own survey expert, Dr. Jacoby, as "a nationally recognized expert on consumer research." D.I. 165 at 6. This puffery is unnecessary and misleading.

As noted above, Mr. McCullough has 40 years of experience in surveys. Ex. 1, McCullough Dep. at 57:18-20; 27:12-28:9; 29:13-24; 94:10-24; Ex. 2, McCullough Dec. at ¶6. His company, Ipsos Mendehlson Inc. (formerly Monroe Mendehlson Research Inc.), is a member

⁴ HP points out that one respondent stated that he was "taking a stab in the dark." D.I. 165 at 17 n. 4. As Mr. McCullough stated during his deposition, such responses do not mean that respondents are actually guessing or arriving at their answer arbitrarily. Rather, this is just the way people sometimes speak. Ex. 1, McCullough Dep. at 169:18-170:23.

⁵ As stated in *Izumi*, the specialized knowledge required by Rule 702 is interpreted liberally to include practical experience, academic training, and credentials. *Izumi Prods. Co.*, 315 F.Supp.2d at 600. A proffered expert need only have skills greater than the average layman. *Id.*

of CASRO (Council of American Survey Research Organizations) and CMOR (Council for Marketing and Opinion Research), trade associations for the marketing research business, and he is personally a member of the American Marketing Association, American Statistical Association, and the American Association of Public Opinion Research (APOR). Ex. 1, McCullough Dep. at 64:8-65:20; Ex. 2, McCullough Dec. at ¶3.

It is important to note that courts have not always praised HP's expert Dr. Jacoby and his work. For instance, in his deposition, Dr. Jacoby noted three instances where the court did not agree with his opinions, and there are a number of courts that declined to follow his opinions. Ex. 4, Jacoby Dep. at 9:8-13:22; *see e.g. Kargo Global, Inc.* 2007 WL 2258688, at * 12 (where the court stated that Rule 403 was clearly warranted in this case stating “[t]he live testimony of Kargo’s highly seasoned and impressively credentialed consumer confusion expert, regarding the results of the deeply flawed Jacoby Survey, would prove to be ‘both powerful and quite misleading’”); *Smith*, 537 F.Supp.2d at 1334 (“Jacoby surveyed an overbroad universe, failed to adequately replicate the shopping experience and asked leading questions. He also surveyed a non-random sample that in any case was too small to allow the results to be projected upon the general market. Thus, the Court finds that the Jacoby survey is so flawed that it does not establish a genuine issue of material fact with regard to actual confusion, much less prove actual confusion.”); *Weight Watchers Int'l, Inc.*, 744 F.Supp. at 1272 (where court found that Dr. Jacoby failed to identify the proper universe); *Leelanau Wine Cellars, Ltd.*, 502 F.3d at 518 (where the court found that Dr. Jacoby had identified an overbroad universe and declined to follow his opinions).

Nonetheless, given the experience of both Dr. Jacoby and Mr. McCullough, “the fact that their work has been criticized in some cases and lauded in others is not surprising. Criticisms or

praise regarding surveys in other cases is not a basis for exclusion. The court's gatekeeping inquiry must be "tied to the facts of a particular case." *Whirlpool Properties, Inc. v. LG Electronics U.S.A., Inc.*, No. 1:03 CV 414, 2006 WL 62846, at * 3 (W.D. Mich. Jan. 10, 2006) (citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 150, 152 (1999)).

CONCLUSION

Mr. McCullough's Surveys satisfy *Daubert*. His surveys are relevant here, and his methodology was not biased nor did it require guessing. HP's complaints, at most, go to the weight to afford Mr. McCullough's opinions at trial and can be handled through cross-examination. HP's motion should be denied.

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/s/ *Julia Heaney*

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June 12, 2008
 2367607

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that on June 26, 2008, I electronically filed the foregoing with the Clerk of the Court using CM/ECF, which will send notification of such filing(s) to the following:

William J. Marsden, Jr.
FISH & RICHARDSON P.C.

I also certify that copies were caused to be served on June 26, 2008 upon the following in the manner indicated:

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Exhibit 1

Walter McCullough

Page 1

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

POLAROID CORPORATION,

Plaintiff,

vs.

No. 6-738 (SLR)

HEWLETT-PACKARD COMPANY,

Defendant.

-----)

VIDEOTAPED DEPOSITION OF

WALTER J. McCULLOUGH

New York, New York

Tuesday, May 6, 2008

Reported by:
SHAUNA STOLTZ-LAURIE
CSR NO. 810490
JOB NO. 202738

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Walter McCullough

<p>1 2 3 4 5 May 1, 2008 6 9:08 a.m. 7 8 Videotaped deposition of WALTER J. 9 McCULLOUGH, held at the offices of 10 Kirkland & Ellis LLP, 153 East 53rd 11 Street, New York, New York, pursuant to 12 notice, before Shauna Stoltz-Laurie, a 13 Notary Public of the State of New York. 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p>Page 2</p> <p>1 2 THE VIDEOGRAPHER: This is tape 3 number one of the videotaped deposition 4 of Walter J. McCullough in the matter of 5 Polaroid Corporation versus 6 Hewlett-Packard Company, in the United 7 States District Court for the District 8 of Delaware, CA number 6-738 (SLR). 9 This deposition is being held at 10 Kirkland & Ellis LLP, 153 East 53rd 11 Street, New York, New York on May 6, 12 2008. The time on the video screen is 13 9:09 a.m. 14 My name is Lee Bowry, I am the 15 legal videographer with Shari Moss & 16 Associates. The court reporter is 17 Shauna Stoltz-Laurie. 18 Will counsel please introduce 19 themselves for the record. 20 MR. BUCHANAN: Good morning. My 21 name is Robert Buchanan from Choate Hall 22 & Stewart. I represent Hewlett-Packard 23 Company, and I'll be conducting the 24 deposition. 25 MS. KINGSBURY: Good morning. My</p>
<p>1 2 A P P E A R A N C E S: 3 4 Kirkland & Ellis LLP 5 Attorneys for Plaintiff 6 200 East Randolph Drive 7 Chicago, Illinois 60601 8 BY: COLBY ANNE KINGSBURY, ESQ. 9 10 CHOATE HALL & STEWART LLP 11 Attorneys for Defendant 12 Two International Place 13 Boston, Massachusetts 02110 14 BY: ROBERT M. BUCHANAN, JR., ESQ. 15 16 ALSO PRESENT: 17 LEE BOWRY, Videographer 18 19 20 21 22 23 24 25</p>	<p>Page 3</p> <p>1 2 McCullough 3 name is Colby Anne Kingsbury. I'm from 4 Kirkland & Ellis, and I represent 5 Polaroid, and I'm here on behalf of Mr. 6 McCullough as well. 7 THE VIDEOGRAPHER: Will the court 8 reporter please swear in the witness. 9 W A L T E R J . M c C U L L O U G H , 10 called as a witness, having been duly 11 sworn by a Notary Public, was examined 12 and testified as follows: 13 EXAMINATION BY 14 MR. BUCHANAN: 15 Q. Good morning, Mr. McCullough. 16 A. Good morning, Mr. Buchanan. 17 Q. We met earlier. 18 Would you spell your last name in 19 full, please? 20 A. Yes. M-c capital C-u-l-l-o-u-g-h. 21 Q. And have you been retained on 22 behalf of Polaroid in this case? 23 A. Yes, I have. 24 Q. And have you been retained by the 25 firm of Kirkland & Ellis on behalf of Polaroid?</p>

2 (Pages 2 to 5)

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Walter McCullough

<p>1 McCullough 2 A. That's correct. 3 Q. And when were you retained? 4 A. I think the initial contact was 5 sometime in October of '07. 6 Q. Who contacted you in October? 7 A. Courtney Holohan was my initial 8 contact person. 9 Q. Courtney Holohan from the Kirkland 10 & Ellis firm? 11 A. That's correct. 12 Q. And in that first contact were you 13 engaged to do something? 14 A. I was -- well, we had some initial 15 discussions. I'm not sure exactly when the 16 approval came, but there were initial 17 discussions about what the case was about and 18 about what they wanted me to do. 19 Q. So in that first contact in October 20 was there discussion of a potential 21 engagement? 22 A. Yes. 23 Q. And as you understood it at that 24 time, what were you potentially engaged to 25 do?</p>	<p>Page 6</p> <p>1 McCullough 2 when you had the word yes, go ahead with the 3 engagement? 4 A. I'm sure there was, but I don't 5 recall when that was. 6 Q. Do you recall whether that was 7 before New Year's, so it was during '07, or 8 after New Years, so it was in '08? 9 A. It was probably '07, but I don't 10 recall specifically. 11 Q. Do you remember whether it was 12 Courtney Holohan who called to tell you that 13 the word was yes, or was it somebody else? 14 A. I think it was her. 15 Q. Had you heard of adaptive lighting 16 before you had the initial contact in this 17 case? 18 A. Not -- not by that time, no. 19 Q. Had you heard of the feature that 20 you later learned was called adaptive 21 lighting? 22 A. I was not aware of that specific 23 feature, no. 24 Q. All right. And were you -- the 25 information that you just told me about in</p>
<p>1 McCullough 2 A. I was -- there was a feature called 3 adaptive lighting technology that Polaroid 4 had maintained had a patent that was 5 infringed by Hewlett-Packard, and this was a 6 feature that was involved in both cameras and 7 printers, and initially my assignment was to 8 survey the relevant consumers and find out 9 the extent to which that feature had a value 10 in both cameras and printers that were put 11 out by Hewlett-Packard. 12 Q. And what you've just told me about, 13 was all of that discussed in your initial 14 contact with Ms. Holohan in October? 15 A. I can't remember the exact 16 conversation -- it was too far back -- but 17 within a series of conversations, that was 18 what was made known to me. 19 Q. And in -- the series of 20 conversations ran through October and on into 21 when? 22 A. Probably on until -- in different 23 degrees until I started doing the study, 24 which I believe was in January. 25 Q. All right. Did there come a time</p>	<p>Page 7</p> <p>1 McCullough 2 your first series of phone calls, did all of 3 that information come to you orally, or did 4 some of it come in the form of documents or 5 other things? 6 A. It was orally, is I recall. 7 Q. And did you speak with anyone else 8 besides Courtney Holohan? 9 A. Initially that's the only person I 10 spoke to. I think she went on trial at some 11 point in time, and she then had a Maria 12 Meginnes talk to me from time to time, but 13 that was much later than the initial 14 conversations. 15 MR. BUCHANAN: Okay. Let me ask 16 if we can mark as [McCullough] 17 Exhibit 1. 18 ([McCullough] Exhibit 1, Monroe 19 Mendelsohn Research, Inc. 2/1/08 invoice 20 to Kirkland & Ellis, marked for 21 identification, as of this date.) 22 Q. Is this a copy of an invoice from 23 your firm to Courtney Holohan at Kirkland & 24 Ellis? 25 A. Yes.</p>

3 (Pages 6 to 9)

Walter McCullough

<p>Page 10</p> <p>1 McCullough 2 Q. Do you recognize this to be your 3 firm's invoice? 4 A. This was my firm's invoice, yes. 5 Q. And is it the -- to your 6 recollection, is this the first invoice for 7 your engagement in this case? 8 A. I believe so. 9 Q. Does this accurately reflect the 10 initial engagement that you had? 11 A. I believe so, yes. 12 Q. I see that it's dated February 1. 13 At that time the survey work had begun; is 14 that correct? 15 A. According to the bill here, the 16 initial phase of the interviewing had been 17 completed. 18 Q. I see that the title of this 19 project is "Adaptive Lighting Technology 20 Consumer Value Survey." 21 What does consumer value survey 22 mean? 23 A. It was just a term that I put on -- 24 I made up the title for this -- to indicate 25 the type of information I was trying to</p>	<p>Page 12</p> <p>1 McCullough 2 about interviews conducted in various 3 shopping malls. 4 When you say "conduct the first 5 phase of interviewing," does that refer to 6 that same type of interviewing in the 7 shopping malls? 8 A. Yes. It's basically -- what I try 9 to do, when time permits, is set up basically 10 two replicates that represent half of the 11 survey being done as the initial phase and 12 the other half being done as the completion 13 phase, so then they're done identically. 14 Q. The initial phase that -- did you 15 conduct an initial phase here in this 16 engagement? 17 A. Yes. 18 Q. And is that reflected in the report 19 that you provided to us later? 20 A. I don't break it out separately, 21 because I don't consider it really to be a 22 separate study. It's really just part of the 23 total study. 24 Q. So that I'm clear, the interviews 25 that were conducted in the initial phase,</p>
<p>Page 11</p> <p>1 McCullough 2 obtain. 3 Q. And what type of information were 4 you trying to obtain? 5 A. The extent to which consumers 6 valued this feature when it was part of 7 either a camera in one case or a printer in 8 another case. 9 Q. And did you go forward with 10 interviews -- 11 MR. BUCHANAN: Strike that. 12 Q. What do you mean by initial phase 13 of interviewing? 14 A. My standard practice, when I do 15 work in this litigation context, is to 16 strongly recommend that approximately half 17 the interviews are done; then we look at the 18 top line results of that, and if those 19 results are going to be helpful to the 20 client, then we'll continue and do the rest 21 of the interview; if it's not, we will stop 22 at that point in time and not spend any more 23 money on the project. 24 Q. Now, I've seen your report -- and 25 we'll ask to mark that a little bit later --</p>	<p>Page 13</p> <p>1 McCullough 2 those are reflected in the report that you've 3 prepared for us? 4 A. Oh, absolutely, yeah. 5 Those would be -- like roughly the 6 first half of the interviews are the initial 7 phase, and then the rest of the interviews 8 are done as the remainder phase. The total 9 represents all the interviews that are in my 10 report. 11 Q. We'll look at the report later, but 12 as I recall, there were some interviews in 13 January and then some more in February. Are 14 those the two phases? 15 A. There was actually -- there was a 16 two-phase setup of the initial printer and a 17 camera also, and that was done probably -- 18 looking at this, probably in January. That 19 study was then completed, but then there was 20 an additional printer survey that was done 21 later, which I believe must have been in 22 February. So the -- half of the study was 23 done in -- in early January, the rest was 24 done either in late January, February -- I 25 don't recall; I have to look at my report --</p>

4 (Pages 10 to 13)

Walter McCullough

<p style="text-align: right;">Page 14</p> <p>1 McCullough 2 but then a second study was done on a second 3 printer. That was done I think probably 4 February.</p> <p>5 Q. Did you do some interviews 6 involving cameras?</p> <p>7 A. I did.</p> <p>8 Q. I don't recall reading about 9 cameras in your report.</p> <p>10 A. I was called by the client at one 11 point, and said that the cameras were no 12 longer going to be an issue from -- from my 13 -- in my situation.</p> <p>14 Q. Had you collected a -- 15 questionnaire responses pertaining to the 16 cameras?</p> <p>17 A. I did have interviews on cameras, 18 just like I did on printers. Counsel had 19 told me that the cameras were out.</p> <p>20 MS. KINGSBURY: I'm going to just 21 object -- excuse me -- at this point for 22 attorney work product.</p> <p>23 MR. BUCHANAN: Let me explore that 24 -- the scope of your objection.</p> <p>25 Q. So at the same time that you</p>	<p style="text-align: right;">Page 16</p> <p>1 McCullough 2 with consumers pertaining to cameras? 3 A. Yes. 4 Q. Did you have those in your mind as 5 you went ahead with further interviews later 6 about printers?</p> <p>7 A. No.</p> <p>8 The two are completely separate. I 9 did -- one survey was about cameras, one 10 survey was about printers, and then the 11 follow-up survey was about printers. The 12 initial survey, cameras and printers, are two 13 different surveys.</p> <p>14 Q. So the survey that I have a report 15 about, does that survey include both the 16 questions from the initial round of printer 17 questions and the later round of printer 18 questions?</p> <p>19 A. Yes. The report you have is based 20 on both the initial survey on the printer, I 21 guess the C6180, and also the second printer, 22 which is five something, if I remember. Yes, 23 that -- that report shows both of the results 24 from both of those surveys.</p> <p>25 Q. So both, the same or substantially</p>
<p style="text-align: right;">Page 15</p> <p>1 McCullough 2 conducted an initial phase of interviewing 3 about printers, you also conducted an initial 4 phase of interviewing about cameras?</p> <p>5 A. That's correct.</p> <p>6 Q. And so people directed by you went 7 out to shopping malls and asked questions 8 about the cameras as well as printers?</p> <p>9 MS. KINGSBURY: I want to object 10 about any questioning on the -- this 11 camera survey, based on the agreement 12 that we have on -- that's in the case, 13 that shows that only documents -- or 14 only things that were relied upon in Mr. 15 McCullough's opinions is something 16 that's subject to deposition and to 17 production. So I'm not going to allow 18 any questions on -- on the cameras 19 surveyed.</p> <p>20 MR. BUCHANAN: Well, I'm going to 21 first test some scope questions, Colby, 22 and then I'll come back and respond to 23 your objection.</p> <p>24 Q. Is it the case that you saw or 25 heard preliminary results from interviews</p>	<p style="text-align: right;">Page 17</p> <p>1 McCullough 2 the same questions were asked to the 3 consumers about the C6180 printer and later 4 the other printer.</p> <p>5 A. Identical question, yes.</p> <p>6 Q. And so the report that you wrote 7 covers both sets.</p> <p>8 A. That's correct.</p> <p>9 Q. When you were writing the report 10 did you have in your mind the preliminary 11 results that you had heard from the interview 12 of the camera people?</p> <p>13 A. No. That had nothing to do with my 14 report on the printers.</p> <p>15 Q. You didn't have it in your mind at 16 all?</p> <p>17 A. That's correct.</p> <p>18 Q. So it's your testimony that you did 19 not -- well, let me ask you. Did you 20 consider, have conscious awareness of, the 21 preliminary results that you had heard about 22 cameras as you wrote your report about 23 printers?</p> <p>24 A. No.</p> <p>25 Q. So it's your testimony that you</p>

5 (Pages 14 to 17)

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Walter McCullough

<p>Page 18</p> <p>1 McCullough 2 were able to put that out of your mind 3 entirely when you wrote your report about 4 printers. 5 A. Yes. 6 It's completely unrelated, in terms 7 of my point of view. 8 Q. And what do you mean, they are 9 unrelated? 10 A. They're two completely different 11 surveys on two different products, and when I 12 was working on the printer report I was 13 thinking in terms of the results of the two 14 printer surveys I did; I was not thinking at 15 all about the camera survey, because that was 16 -- from my point of view, I was told that 17 this was taken off -- off the table, so to 18 speak. 19 Q. Did you yourself design the 20 questions that were asked as a printer 21 survey? 22 A. Yes. 23 Q. Did you yourself design the 24 questions that were asked in the camera 25 survey?</p>	<p>Page 20</p> <p>1 McCullough 2 sought people to ask questions about the 3 printers, also seek people to ask -- answer 4 questions about the cameras? 5 A. Let me think about that. 6 I think they were separate 7 screeners. But it goes back a ways, so I'm 8 not positive. I think they were separately 9 done. But it was an along time ago, and I 10 forgot the detail of it. 11 Q. Well, were there sent to you any 12 documents that reflect responses that people 13 indicative about cameras? 14 A. You mean -- you mean the 15 interviews? 16 Q. Yes. 17 A. Yes. 18 Q. And so -- now, about printers, I've 19 received from counsel about what in my -- 20 what fills about one full box of cartons of 21 questionnaire responses -- 22 A. Right. 23 Q. -- containing the printer survey. 24 A. Right. 25 Q. Are you familiar with those?</p>
<p>Page 19</p> <p>1 McCullough 2 A. Yes. 3 Q. Did you -- when did you work on the 4 design of questions for the printer survey, 5 which began in late January '08? 6 A. Sometime in January. I can't 7 recall exact dates. 8 Q. And was it also in January that you 9 worked on designing the questions that were 10 asked this the camera survey? 11 A. That's correct. 12 Q. Did you work on both of those on 13 the same days in January? 14 A. It could have been. 15 Q. Were they -- were the initial 16 interviews conducted in the same shopping 17 malls? 18 A. Yes, they were. 19 Q. Were the initial shopping -- 20 interviews conducted by the same interviewing 21 -- interviewers in the same shopping malls? 22 A. Some may have been and some may 23 have been different interviewers, depending 24 on the mall situation. 25 Q. Did the interviewers, when they</p>	<p>Page 21</p> <p>1 McCullough 2 A. Yes. 3 Q. And those came to your firm 4 initially? 5 A. The original ones did, yes. 6 Q. And then you then provided those to 7 counsel. 8 A. Correct. 9 Q. Did you similarly receive 10 questionnaire responses pertaining to 11 responses about the cameras? 12 A. From the field people that were 13 getting -- yes, I did. 14 Q. So does your firm have those in 15 your possession? 16 A. Yes, we do. 17 Q. And have you provided those to 18 counsel? 19 A. They did not ask for them. 20 Q. So you still have them? 21 A. I still have them in my office. 22 Q. How many discussions did you have 23 with counsel about the preliminary results of 24 the camera questions? 25 A. I think probably one.</p>

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<p>1 McCullough</p> <p>2 Q. Did you yourself have those</p> <p>3 discussions?</p> <p>4 A. Yes.</p> <p>5 Q. And who did you speak with?</p> <p>6 A. Courtney Holohan I believe.</p> <p>7 Q. And was this in January '08?</p> <p>8 A. It's hard to remember dates on</p> <p>9 these things. It's either January, February</p> <p>10 that she spoke to me about it.</p> <p>11 Q. Was it all in one phone call that</p> <p>12 you spoke about preliminary results and she</p> <p>13 said no, don't go forward with that?</p> <p>14 A. No. I think -- let me correct</p> <p>15 something, because maybe I gave you the wrong</p> <p>16 impression. I believe we actually finished</p> <p>17 the interviews on the cameras. We did the</p> <p>18 preliminary results. The results were</p> <p>19 acceptable to the client to proceed with</p> <p>20 that, and I think we finished the interviews</p> <p>21 up on that, and then I got a call from</p> <p>22 Courtney saying that the cameras are out of</p> <p>23 the case or they're out of the -- you know,</p> <p>24 they're off the table; you don't need to</p> <p>25 report anything on cameras. But we had</p>	<p>Page 22</p> <p>1 McCullough</p> <p>2 in forming his opinions, and I think</p> <p>3 these are included. We'll need to take</p> <p>4 that up in the appropriate time at in</p> <p>5 the appropriate way, but that's my</p> <p>6 position.</p> <p>7 MS. KINGSBURY: Okay. Well, just</p> <p>8 in response to that, the documents that</p> <p>9 were not used that were relevant to the</p> <p>10 camera survey are not anything that are</p> <p>11 part of the survey that was -- the</p> <p>12 report that was produced. You have all</p> <p>13 the documents that he relied on in the</p> <p>14 opinions that he has set forth in this</p> <p>15 case.</p> <p>16 MR. BUCHANAN: I understood it to</p> <p>17 be or I think I understand it to be your</p> <p>18 position that all the documents that are</p> <p>19 relating to the questions asked about</p> <p>20 printers have been provided to us, and</p> <p>21 my comment is as this expert develops</p> <p>22 his opinions in the case, necessarily he</p> <p>23 also considers what he has learned about</p> <p>24 his own survey about cameras, survey</p> <p>25 questions that he developed at the same</p>
<p>Page 23</p> <p>1 McCullough</p> <p>2 finished the interviews on that, I believe.</p> <p>3 Q. Do you have any further</p> <p>4 understanding of why cameras were, to repeat</p> <p>5 your phrase, off the table?</p> <p>6 MS. KINGSBURY: I'll object as to</p> <p>7 attorney work product.</p> <p>8 You can only answer to the extent</p> <p>9 that there was anything you considered</p> <p>10 in forming your opinions.</p> <p>11 A. I -- I -- I was not given any</p> <p>12 information about why. I was surprised about</p> <p>13 it, but that's -- we were told they're off</p> <p>14 the table.</p> <p>15 REQ MR. BUCHANAN: Okay. Let me state</p> <p>16 for the record that it would seem to me</p> <p>17 that a survey expert who designs a</p> <p>18 survey, continues forward with a further</p> <p>19 round of the survey, then writes a</p> <p>20 report about it, in doing so is</p> <p>21 necessarily considering the information</p> <p>22 that he learned in the initial phase of</p> <p>23 his interviewing, so it's our position</p> <p>24 on behalf of HP that we are entitled to</p> <p>25 all of the documents that he considered</p>	<p>Page 25</p> <p>1 McCullough</p> <p>2 time for the same case for the same</p> <p>3 reason. And so we will reserve our</p> <p>4 right to seek to compel the production</p> <p>5 of those documents, and if we prevail in</p> <p>6 that, then we'll also reserve the right</p> <p>7 for a further deposition on that</p> <p>8 subject.</p> <p>9 MS. KINGSBURY: Okay. And</p> <p>10 obviously we object, but we'll get into</p> <p>11 that more, if you prefer, off the</p> <p>12 record.</p> <p>13 MR. BUCHANAN: Yeah, that was my</p> <p>14 objective, was to --</p> <p>15 MS. KINGSBURY: Okay.</p> <p>16 MR. BUCHANAN: -- at the moment set</p> <p>17 out our positions so that there's no</p> <p>18 misunderstandings, and then move</p> <p>19 forward.</p> <p>20 Q. Let me return your -- direct your</p> <p>21 attention back to Exhibit 1 again. The -- I</p> <p>22 see there was -- it's stated here, estimated</p> <p>23 billing of 144,000 broken out between an</p> <p>24 amount for a printer and an amount for</p> <p>25 camera. Could you explain that estimate to</p>

7 (Pages 22 to 25)

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<p>Page 26</p> <p>1 McCullough 2 me, and tell me how you arrived at it? 3 A. Well, the estimate's based upon 4 determining what all costs are going to be on 5 the project, and then adding up all the costs 6 on the project, and then coming up with a 7 number that I give the client ahead of time 8 so they know what this project's going to 9 cost them.</p> <p>10 Q. And how did you split it out 11 between printer 80,000 and camera 64,000?</p> <p>12 A. The reason why the camera would be 13 somewhat lower would probably be due to the 14 fact that I must have assumed a lower 15 incidence level.</p> <p>16 Q. What do you mean by lower incidence 17 level?</p> <p>18 A. I knew you'd ask that question. 19 (Laughter.)</p> <p>20 A. The best way to explain it is if 21 you were to take a cross-section of a hundred 22 people and asked them questions that qualify 23 them to answer the interview, how many of 24 them would -- would qualify. So let's say if 25 it's ten out of the hundred, you have a 10</p>	<p>Page 28</p> <p>1 McCullough 2 But it's an important fact in the field, 3 because you have to get a cost estimate in 4 terms of doing the project, and therefore you 5 have to realize how many people do I have to 6 approach to find enough people to satisfy the 7 survey requirements. The lower the 8 incidence, the harder it is to get somebody 9 who qualifies, and the more expensive it is.</p> <p>10 Q. So what incidence means as applies 11 to --</p> <p>12 A. (Coughing) Excuse me.</p> <p>13 Q. Do you have enough water?</p> <p>14 A. I'm good. It's just allergies this 15 time of this year. Sorry.</p> <p>16 Q. So what "incidence" means as 17 applied to your particular survey is the 18 interviewers have to go out and talk to about 19 how many people in the shopping mall in order 20 to get somebody who's qualified.</p> <p>21 A. Generally speaking, that's correct.</p> <p>22 Q. Does the incident -- does that cost 23 estimate also take into account whether 24 people are willing to talk, so you might have 25 somebody who is qualified but doesn't want to</p>
<p>Page 27</p> <p>1 McCullough 2 percent incidence level. So if the incidence 3 level of people who would qualify for the 4 camera interview, it must have been a lower 5 incidence level -- I'm sorry. It was the 6 opposite impression. The printer must have 7 been a lower incidence level than the camera, 8 because the printer estimate was higher. The 9 lower the incidence, the higher the cost of 10 the project, because it's hard to find people 11 who meet that qualification.</p> <p>12 Q. What does incidence level mean as 13 applied to your particular survey, sending 14 out to ask people about printers in the 15 shopping malls?</p> <p>16 A. Well, what it means is how -- we 17 have to do an estimate of what the incidence 18 level is likely to be in order to put an 19 estimate together, and basically I look for 20 data to try to do that. I usually ask my 21 client. They sometimes give me a little 22 information on it. I frequently have to 23 guess at it, based on my 40 years of 24 experience working in the business; that the 25 clients often don't know the incidence level.</p>	<p>Page 29</p> <p>1 McCullough 2 spend the time on it? Is that included in 3 this estimate as well?</p> <p>4 A. Yes. I -- I -- I factor that into 5 the incidence level, and the field factors 6 that into the pricing of the surveys.</p> <p>7 Q. So your estimates reflect that you 8 thought it would be -- it would take more 9 initial approaches to get the right number of 10 people to answer questions about printers as 11 compared to cameras.</p> <p>12 A. Correct.</p> <p>13 Q. Why did you think so?</p> <p>14 A. It was either -- getting back, it 15 was either information that I obtained from 16 -- from somewhere. Sometimes I go on the 17 Internet and I look for levels of printer 18 sales or -- or camera sales, or sometimes 19 I'll find studies even about how many people 20 buy these things, and I look for various 21 sources frequently on the Internet, and then 22 I try to use my -- my 40 years of intuition 23 and come up with a number, and scarily 24 enough, I'm usually pretty close.</p> <p>25 Q. So just in case -- let me ask that</p>

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<p style="text-align: right;">Page 30</p> <p>1 McCullough 2 we mark [McCullough] Exhibit 2, and I'll ask 3 if this document reflects what you've just 4 been talking about. 5 ([McCullough] Exhibit 2, printout 6 from Internet on 2005 printer sales, 7 marked for identification, as of this 8 date.) 9 (Discussion off the record.) 10 A. Excuse me. (Reading) Yeah, my -- 11 my -- "Assume 10 % incidence," that's my 12 handwriting there, and this is part of the 13 information that I happen to get that made me 14 somehow come up with a 10 percent incidence 15 level for the -- this was for the printers. 16 Q. So this is your handwriting here, 17 "Assume 10 % incidence"? 18 A. Yes. 19 Q. And does this refer to the printers 20 that you were asking about in your survey? 21 A. That's correct. 22 Q. And did you print out this 23 particular page of information, or have 24 somebody print it out for you? 25 A. I think I printed it out from my</p>	<p style="text-align: right;">Page 32</p> <p>1 McCullough 2 qualifying? 3 A. That was the criteria in my survey. 4 I'm paraphrasing a little bit, but that's 5 pretty much the qualification. 6 Q. And so your estimate was that of 7 the people walking around in the shopping 8 mall could be approached, 10 percent would 9 meet those criteria. 10 A. Generally speaking, yes. 11 Q. Did it turn out that way; do you 12 know? 13 A. I believe it was close to this. 14 And the reason I say that is if it's not 15 close to that, then my field director would 16 tell me that the field wants more money to do 17 a study, if it's much below that, or we're 18 going to get some money back on the study. 19 And I don't -- I didn't hear either of those 20 things. So it's within several -- it's 21 usually within five points of that or less. 22 When I get no playback, it usually gives 23 (sic). 24 Q. Did you make an estimate of 25 incidence for the cameras as well?</p>
<p style="text-align: right;">Page 31</p> <p>1 McCullough 2 computer. 3 Q. And how did you get to 10 percent? 4 A. Well, that's good question. 5 I probably took some of the 6 information from here, and I probably also 7 took some other information which I may have 8 gotten off the Internet, which I didn't print 9 out, that led me to believe it could be 10 around 10 percent. It's hard to reconstruct 11 now, because I put a lot of pieces of 12 information together, and then to that I add 13 my likely guesstimate, which is the best I 14 can do. 15 Q. Now, does 10 percent mean that of 16 the people walking around in the shopping 17 malls, 10 percent of those people would 18 qualify? 19 A. Pretty much. 10 percent of a 20 cross-section of adults, in my estimation, 21 would either have indicated they bought a 22 color printer in the past year or might 23 consider buying one in the next -- next 12 24 months. 25 Q. And that's the criteria for</p>	<p style="text-align: right;">Page 33</p> <p>1 McCullough 2 A. Yes, I'm sure I did. 3 Q. Do you remember what it was? 4 A. No, but based on the camera price 5 being lower, it must have been a little bit 6 higher than this. 7 Q. Do you remember why you thought it 8 would be a higher incidence for cameras? 9 A. I -- I probably, you know, did the 10 same process for cameras, you know, went on 11 the Internet, tried to gather information 12 about that, and from whatever information I 13 gathered and a large degree of my own 14 intuition, I came up with a number somewhat 15 higher. 16 Q. And did you -- have you kept back 17 at your office the information that you 18 gathered with respect to cameras? 19 A. The questionnaires? Yes. 20 Q. No, I meant the -- 21 A. Oh. 22 Q. -- whatever information you 23 gathered in forming an estimate of the 24 incidence. 25 A. I may or may not have a page</p>

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1 McCullough
 2 similar to this. Sometimes I do and
 3 sometimes I don't. The only (unintelligible)
 4 -- to have it printed out, providing it
 5 wasn't printed out.

6 Q. Speaking of which, beyond
 7 Exhibit 2, do you have any other information
 8 that you used in making your estimate about
 9 incidence for printers?

10 A. Nothing that I -- nothing that I
 11 gathered. I did go on the Internet to look
 12 at things, but I didn't print anything out.

13 MR. BUCHANAN: Let me ask to mark
 14 this next one as Exhibit 3.

15 ([McCullough] Exhibit 3, Monroe
 16 Mendelsohn Research, Inc. 2/1/08 invoice
 17 to Polaroid Corporation, marked for
 18 identification, as of this date.)

19 THE WITNESS: Thank you.

20 Q. Do you recognize what's been marked
 21 as Exhibit 3?

22 A. Yes. It appears to be a -- it
 23 appears that the first invoice was directed
 24 to Courtney Holohan, and as I recall, Maria
 25 Meginnes called me again and said send it

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1 McCullough
 2 paid for a while, and, you know, I inquired
 3 with this people -- that's what usually
 4 happens -- and they said, oh, well, if you
 5 send it to this gentleman, he'll take care of
 6 it.

7 Q. You say "that's what usually
 8 happens." Do you recall that happening in
 9 this case?

10 A. I recall -- no, I don't recall
 11 specifically that happening, but that's the
 12 likeliest scenario when these things happen.

13 Q. What's the name of your controller?

14 A. Alex Cepeda.

15 Q. How do you spell the last name?

16 A. C-e-p-e-d-a.

17 Q. And is he a he?

18 A. That's a he, Alex.

19 Q. Is he an employee of your firm?

20 A. Yes, he is,

21 Q. Now, could I direct your attention
 22 to the line that says "Description of
 23 Billing," ends at 72,000. Underneath that
 24 there's some smudge marks. Do you know what
 25 those are?

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1 McCullough
 2 directly to this gentleman at Polaroid. But
 3 I think it's the same invoice. You see the
 4 same invoice number? It's just the same
 5 invoice that's redirected to the person at
 6 Polaroid who evidently is the person who must
 7 have paid the bill.

8 Q. As best you can tell, is it exactly
 9 the same exact for except for that?

10 A. Yes. Yes, it's the same invoice
 11 number.

12 And I do recall that she asked me
 13 to redirect the bill to somebody at some
 14 point in time.

15 Q. Did she say anything else about
 16 why?

17 A. If I wanted to get paid, that was
 18 who to send it to.

19 (Laughing) That's enough of a why.

20 Q. And do you recall when?

21 A. No, I don't, but it was a while
 22 after, because probably what happened is I
 23 probably -- we didn't get paid within a
 24 certain amount of time, and my controller
 25 probably came to me and said we haven't been

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1 McCullough
 2 A. I think the printer must have --
 3 the copy must have just left a mark.
 4 Q. Do you recall anything being
 5 written on this?
 6 A. No, there's nothing on it.
 7 This is just the printer smudge.
 8 Yeah.
 9 Q. And let me ask the same question.
 10 Down at the bottom of the page, underneath
 11 the line that says "Terms: Payment Due
 12 Within," do you know if there was something
 13 written there?
 14 A. No, I would expect the rollers were
 15 dirty on whoever printed this.
 16 Q. So you're not aware of any
 17 additional writing.
 18 A. No. I'm relatively confident there
 19 wasn't any.
 20 MR. BUCHANAN: Let me ask that we
 21 mark Exhibit 4.
 22 ([McCullough] Exhibit 4, Monroe
 23 Mendelsohn Research, Inc. 3/7/08 invoice
 24 to Polaroid Corporation, marked for
 25 identification, as of this date.)

10 (Pages 34 to 37)

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<p>Page 38</p> <p>1 McCullough 2 Q. Do you recognize Exhibit 4? 3 A. Yes. It's my -- my invoice. 4 Q. Now, this one is not the same as 5 the ones we've seen before dated February 1. 6 A. That's correct. 7 Q. Is this the second invoice for your 8 project? 9 A. This is I believe the second 10 invoice, yes. 11 Q. So the first invoice estimated a 12 hundred forty four thousand, and this one 13 likewise estimated a total of a hundred forty 14 four thousand? 15 A. Correct. 16 Q. The first invoice called for a 17 payment of 72,000? 18 A. Yes. 19 Q. And this one calls for an 20 additional payment of 72,000, bringing it up 21 to a total of one forty four? 22 A. That's correct. 23 Q. So this invoice calls or covers the 24 initial phase of both the printer survey and 25 the camera survey?</p>	<p>Page 40</p> <p>1 McCullough 2 A. In terms of invoices? 3 Q. Yes. 4 A. Just that -- just the likely 5 conversation was -- I'm trying to -- I'm 6 trying to -- assuming this happened is that 7 when the bill initially wasn't paid in the 8 30-day period, and Maria Meginnes had me 9 redirect it. Except for that conversation, 10 I'm not aware of any other conversations. 11 Q. When did you start writing your 12 report? 13 A. I can't remember, but probably just 14 shortly before I delivered it, which is -- if 15 you look at the report, there's a signed date 16 here. It was probably a couple days before 17 that. 18 Q. Did you start writing it at the 19 time that the results began to be reported to 20 you? 21 A. No. I wrote the report once the 22 results were complete. 23 Q. How did it -- 24 MR. BUCHANAN: Strike that. 25 Let me ask that we mark the next</p>
<p>Page 39</p> <p>1 McCullough 2 A. No. It covers the total cost of 3 the first two surveys, because it says 4 "Amount due upon delivery of final report." 5 Q. And these are called, up at the 6 top, "Initial Two Surveys." What does 7 "initial" mean in this context? 8 A. There was a third survey, which is 9 the second printer survey that was done. 10 Q. We'll get to that in a moment. 11 Did you have any discussion with -- 12 oh. 13 MR. BUCHANANA: Strike that. 14 Q. Did you ever have any discussion 15 directly with Polaroid during the course of 16 your project? 17 A. No. 18 Q. And do you know if your controller 19 had any discussion directly with Polaroid? 20 A. Not that I'm aware of. I don't 21 think so. 22 Q. In connection with these two 23 invoices that we've seen so far, did you have 24 any further conversation with Kirkland & 25 Ellis other than what you've told me?</p>	<p>Page 41</p> <p>1 McCullough 2 exhibit. 3 ([McCullough] Exhibit 5, Monroe 4 Mendelsohn Research, Inc. 3/7/08 invoice 5 to Polaroid Corporation, marked for 6 identification, as of this date.) 7 Q. Have we have put in front of you as 8 Exhibit 5 Invoice No. 5431? 9 A. Yes. 10 Q. And this is also dated March 7, 11 2008? 12 A. Okay. 13 Q. And this is for the additional 14 printer survey? 15 A. Yes. 16 Q. How did it come about that you were 17 asked to do an additional printer survey? 18 A. Ms. Holohan called me up and said 19 that I could -- asked me if I could do an 20 additional printer survey with a printer that 21 was a less expensive product, and I said yes, 22 of course. 23 Q. So now, to try to clarify some of 24 these things, let me ask to mark a copy of 25 your report.</p>

11 (Pages 38 to 41)

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Walter McCullough

<p>1 McCullough 2 ([McCullough] Exhibit 6, Walter 3 McCullough March 2008 expert report, 4 marked for identification, as of this 5 date.) 6 MS. KINGSBURY: This is 6; is that 7 right? 8 THE WITNESS: Yes. 9 MR. BUCHANAN: Yes. 10 Q. Do you recognize as Exhibit 6 a 11 copy of your report? 12 A. Yes, I do. 13 Q. Is this the report that you've been 14 referring to? 15 A. That's correct. 16 Q. And your signature appears at the 17 end of the report section about eight pages 18 in? 19 A. That's correct. That's correct, 20 yes. 21 Q. And when I turn to Exhibit C I see 22 that one printer you asked about was the 23 Photosmart C6180 listed with a price of 24 \$299.99; is that right? 25 A. Let me find it. (Perusing</p>	<p>Page 42</p> <p>1 McCullough 2 MS. KINGSBURY: Thank you. 3 Q. When you spoke with Ms. Holohan 4 about the results, did you make any 5 comparison between the results for the 6 Photosmart printer and the results for the 7 camera? 8 A. No. 9 Q. Did you yourself compare the 10 results for the Photosmart printer and the 11 results for the camera? 12 A. No. I did them in two separate 13 surveys. 14 Q. Did the survey for the camera have 15 a similar design to the survey for the 16 Photosmart printer? 17 A. Yes. 18 Q. Was the survey for the camera 19 designed to be carried out in the malls in a 20 manner similar to the survey for the 21 Photosmart printer? 22 A. Yes, it was. 23 Q. Now, when we go on to the survey 24 for the Officejet 5610, the less expensive 25 printer, was that designed to be carried out</p>
<p>Page 43</p> <p>1 McCullough 2 document). 3 Q. You just passed it I think. 4 A. Yes. Yes, that was the first one I 5 tested. 6 Q. And so the initial survey was about 7 this printer? 8 A. That's correct. 9 Q. And then if you turn to the next 10 page, the next page shows the HP Officejet 11 5610 with a price after rebate of \$99.99. Is 12 that the second printer that you tested? 13 A. That's correct. 14 Q. So that was tested in the 15 additional survey that we've referred to on 16 the Exhibit 5 invoice? 17 A. That's correct. 18 Q. Your initial round of surveys 19 tested an HP Photosmart C6180 and also at the 20 same time you were conducting a test on the 21 cameras; is that right? 22 A. One particular camera. 23 MS. KINGSBURY: (Sneezing.) 24 THE WITNESS: Bless you. 25 MR. BUCHANAN: Bless you.</p>	<p>Page 45</p> <p>1 McCullough 2 in a similar manner to the survey for the 3 Photosmart C6180, the more expensive printer? 4 A. Yes. 5 Q. And were the questions for the less 6 expensive printer designed to be similar to 7 the questions for the more expensive printer? 8 A. They were virtually identical. 9 Q. Did you compare -- in your report, 10 did you compare the results for the 11 Photosmart C6180 and the results for the 12 Officejet 5610? 13 A. I didn't really compare the 14 results. I reported them independently. 15 Q. But you reported both of those 16 results in the report that you have in front 17 of you as Exhibit 6. 18 A. Right. 19 They're both in the same report, 20 but I really didn't draw a comparison between 21 the two of them. 22 Q. When you were conducting the 23 initial printer survey on the Officejet 5610 24 did your interviewers also at that time ask 25 people questions about the Photosmart C6180?</p>

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<p style="text-align: right;">Page 46</p> <p>1 McCullough 2 A. No. It was completely separate, at 3 a later point in time. 4 Q. So first you did the questions 5 about the C6180 and later you did questions 6 about the 5610. 7 A. Correct. 8 Q. Is that stated in your report? 9 A. Well, it's -- I'm not sure it's in 10 the actual dates. Let me go back. (Perusing 11 document) Well, the field dates are in the -- 12 the Supervisor Instructions or the Interview 13 Instructions (inaudible) by the supervisors. 14 Q. I think you might need to enunciate 15 a little bit more -- 16 A. I'm sorry. 17 Q. -- for the court reporter. 18 A. I'm sorry. 19 Let me take a look at the 20 Supervisor Instructions, which are in 21 Exhibit D (ph.) -- 22 THE COURT REPORTER: D as in dog, 23 sir? 24 (Discussion off the record.) 25 A. -- B as in bravo. It talks about</p>	<p style="text-align: right;">Page 48</p> <p>1 McCullough 2 A. Right. 3 Q. And that -- that is the job number 4 for the Adaptive Lighting Technology Consumer 5 Value Survey which had a printer component 6 and a camera component; is that correct? 7 A. Correct. 8 Q. And then the invoice dated March 7 9 for the additional printer survey has a new 10 job number, MMR Project No. 4462; is that 11 right? 12 A. That's correct. 13 Q. So your report has described the 14 printer results from job number 4450 and has 15 described the printer results from job number 16 4462; is that right? 17 A. Correct. 18 Q. And then is there -- so now if I 19 continue in Exhibit B, I see further 20 Supervisor Instructions with the heading at 21 the top "MMR #4462"? 22 A. Yes. 23 Q. And that refers to the additional 24 printer survey? 25 A. That's correct.</p>
<p style="text-align: right;">Page 47</p> <p>1 McCullough 2 the field dates January -- this is on the 3 initial printer study -- between January 24th 4 and January 27th was the initial phase of 5 that. 6 Q. Are you reading from -- 7 A. From page three. 8 Q. -- Exhibit B, at page numbered 9 three? 10 A. Yeah, where it says "4450P" at the 11 top. 12 Q. What does 4450P stand for? 13 A. Our job number 4450 is just a 14 number that we assign sequentially for jobs, 15 and the P means printer. 16 Q. And so did the same job number 4450 17 apply for all of the work that you've 18 described so far today? 19 A. 4450 represents the work -- the 20 survey for the first printer. 4462 21 represents -- which is another job number, is 22 the work done for the second printer. 23 Q. So now I see that on the first 24 invoice dated February 1 we have a reference 25 to "MMR Project No. 4450."</p>	<p style="text-align: right;">Page 49</p> <p>1 McCullough 2 Q. And page three tells me that the 3 dates of that are from February 14th to 4 February 18, 2008? 5 A. Yes. 6 Now, that is the -- we -- that's 7 the dates of the initial phase of 8 interviewing. What traditionally is done in 9 my work is usually one weekend we do the 10 initial phase, then we look at the results, 11 and if we continue on the study, the balance 12 is done the following weekend. So the dates 13 that are here for 4450, which is the initial 14 printer, are -- is January 24th through 27th, 15 that would represent the initial phase. The 16 following weekend would be the remainder 17 phase. For the second printer survey the 18 initial phase would be done February 14th 19 through February 18th, and then the following 20 weekend would be the remainder phase for the 21 remaining printer survey. 22 Q. So now let me go back to the 23 January phase so I make sure I understand 24 this. 25 A. Sure.</p>

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<p>Page 50</p> <p>1 McCullough 2 Q. An initial phase of interviews was 3 done January 24th through January 28th. 4 A. 27th, actually. 5 Q. I'm sorry. 6 And those interviews were done both 7 on the Photosmart C6180 and on the camera? 8 A. Correct. 9 Q. Was there, for that job 4450, a 10 subsequent round of interviews the following 11 weekend? 12 A. Yes. 13 Q. And did those interviews proceed 14 both for the Photosmart printer and for the 15 cameras? 16 A. Yes. 17 Q. And were results reported to you 18 for both weekends in January or, I'm sorry, 19 both sets of dates in January, both for the 20 Photosmart printer and for the cameras? 21 A. Well, the -- the January was the 22 first phase, and that would have gone into 23 February, because we ran out of days in the 24 month. 25 Q. Thank you for that.</p>	<p>Page 52</p> <p>1 McCullough 2 A. No. 3 Q. Why was there a first one round and 4 then a second round? 5 A. Yeah, I was trying to explain it 6 before, but I guess I didn't do a good job of 7 it. 8 In all my surveys I do for 9 litigation purposes, I try to -- I break them 10 into two pieces, mostly from a monetary point 11 of view, where roughly half the interviews 12 are done, and if it's a mall, they're usually 13 done over a long weekend, and then I'm able 14 to look at the results by the middle of that 15 week after I get them back from the field and 16 give the clients some directions as to what 17 the results are likely to show just by my 18 just looking at the questionnaires. If the 19 results are helpful to the client, then they 20 continue or we continue and do the second 21 phase. If not, we don't spend a lot of money 22 doing something they can't use. And I do 23 that in all cases where I have the time to do 24 it. 25 Q. Did you -- after you saw the first</p>
<p>Page 51</p> <p>1 McCullough 2 A. (Laughing). 3 Q. Thank you for that correction. 4 But -- 5 A. Yeah -- 6 Q. -- so -- 7 A. -- the following weekend after that 8 would have been the second remainder phase, 9 and that would have completed the interviews 10 both for the initial printer survey and the 11 initial camera survey. 12 Q. And you've seen the results from 13 all of those. 14 A. I've seen the results from the -- 15 I've seen the questionnaires from all of 16 them. I don't know if we even tabulated the 17 final results for the camera or not, since 18 I'm not sure when they came out of the 19 picture, so I may not have tabulated the 20 results for those. 21 Q. Was there a third round of 22 interviews for the Photosmart C6180? 23 A. No. No. 24 Q. Was there a third round of 25 interviews for the cameras?</p>	<p>Page 53</p> <p>1 McCullough 2 round of results from the January 18 -- from 3 the first round in January -- 4 A. Okay. 5 Q. -- did you have such a conversation 6 with the law firm, where you reported what 7 you were seeing so far? 8 A. Yes. 9 Q. What were you seeing at that point? 10 A. I was reporting on the types of 11 levels that I was getting to the open-ended 12 question particularly, and giving them an -- 13 an idea of what the results were. 14 Q. And do you recall what they were, 15 what you had seen at that time? 16 A. I don't recall what they were, but 17 they were such that the client told me to 18 continue. 19 Q. So continued at that point for the 20 Photosmart printer and also continued at that 21 point for the cameras? 22 A. Yes. 23 Q. Was it one camera that was tested, 24 or more than one? 25 A. It was just one camera.</p>

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<p>1 McCullough 2 Q. Do you remember the name of the 3 camera? 4 A. No. I can barely remember these 5 names. I don't remember the name, no. 6 Q. It was an HP camera, I take it? 7 A. Yes, it was an HP camera. 8 MR. BUCHANAN: Let me ask to mark 9 the next exhibit. 10 ([McCullough] Exhibit 7, invoice to 11 Polaroid, marked for identification, as 12 of this date.) 13 Q. Do you recognize Exhibit 7 as a 14 further invoice from your firm to Polaroid 15 with a copy to Kirkland & Ellis? 16 A. Yes. 17 Q. And this one covers both job 18 numbers 4450 and 4462? 19 A. Yes. 20 Q. And is this the most recent invoice 21 that you have submitted to date? 22 A. Yes. 23 Q. I assume there will be another 24 invoice after the deposition, but this is as 25 you've gotten so far?</p>	<p>Page 54</p> <p>1 McCullough 2 but I'm not sure. I don't remember the 3 details of the conversations. 4 Q. And there's a reflection for time 5 of senior project staff. Who was that? 6 A. Probably at that point it was 7 Jackie Cummings, who is -- used to be the 8 person that was my project director working 9 on projects with me on these types of 10 projects. 11 Q. And I see that the "Re" line of 12 this invoice is "Printer and camera surveys." 13 Was the work that is reflected in this 14 invoice involve both printers and cameras? 15 A. Where do you see "printers and 16 cameras"? 17 Q. Underneath the address -- 18 A. Oh. 19 Q. -- above the line. 20 A. Now, the reason for that is the 21 carry-over from the last bill, which is -- I 22 used the last invoice as a model, and just 23 never changed it. It could have been just 24 printer surveys. I just carried over the -- 25 the title from the previous invoices. I</p>
<p>Page 55</p> <p>1 McCullough 2 A. Correct. 3 Q. What is the work reflected in this 4 invoice? 5 A. I don't know the exact nature of 6 it, but obviously I spent some time with 7 counsel after -- after the report is 8 completed I bill for my time at \$600 an hour 9 and other time appropriately. It probably -- 10 some of this probably is related to the 11 production. That's probably what it is, 12 thinking back on it, production and 13 conversation with counsel, because I have 14 clerical staff here, and they are probably, 15 just you know, making copies of the 16 questionnaire, and then I see there's 17 photocopies and shipping down there. So this 18 is basically the cost that relates to 19 production but possibly some conversations I 20 had with counsel about some issues. 21 Q. And do you recall who, which 22 counsel you spoke with? 23 A. It's probably Maria Meginnes, 24 because I think Courtney Holohan was still in 25 trial at this time. So I think it was her,</p>	<p>Page 57</p> <p>1 McCullough 2 probably should have just said printer 3 surveys, because at that time camera survey 4 was not an issue. 5 Q. So is it your testimony that the 6 work reflected on the March 31 invoice 7 involves only printers and not cameras? 8 A. No. 9 MR. BUCHANAN: So I suggest we take 10 a break. It's been about an hour. 11 THE VIDEOGRAPHER: Going off the 12 record. The time is 10:01 a.m. This is 13 the end of tape one. 14 (Recess taken.) 15 THE VIDEOGRAPHER: We are back on 16 the record. The time is 10:23 a.m. 17 This is the beginning of tape two. 18 Q. Mr. McCullough, how many surveys 19 roughly have you done in your career? 20 A. Thousands. 21 Q. And how many for litigation have 22 you done roughly? 23 A. Hundreds. 24 Q. How many times have you testified 25 in court?</p>

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<p style="text-align: right;">Page 58</p> <p>1 McCullough 2 A. I'd be really guessing at this, but 3 probably 30, 40 times maybe? 4 Q. And how many depositions would you 5 guess? 6 A. Maybe twice that number. 7 Q. Your report tells us, does it, the 8 instances where you have provided testimony 9 during the last four years? 10 A. That's correct. 11 Q. And that's at the very end of your 12 report? 13 A. That's correct. 14 Q. Do you know how it came about that 15 Kirkland & Ellis contacted you? 16 Had you worked with them before? 17 A. I'd worked with a Mr. Paul Garcia 18 previously, and that may be how they found 19 out about it. 20 Q. Who is Paul Garcia? 21 A. He's an attorney from Kirkland & 22 Ellis. 23 Q. Which city? 24 A. Chicago. 25 Q. How did you get into the business</p>	<p style="text-align: right;">Page 60</p> <p>1 McCullough 2 THE WITNESS: Arnold & Porter, I'm 3 sorry. 4 A. -- Arnold & Porter from Washington, 5 law firm, and it had something to do -- I 6 think it was a false advertising case. 7 Q. Was there a reported decision in 8 that case; do you know? 9 A. Yes. That's how the lawyers 10 started calling me, I think, from the 11 decision. 12 Q. And was there a Court of Appeals 13 decision in that case; do you know? 14 A. I don't know. 15 Q. You went to -- you had an 16 undergraduate degree, yes? 17 A. Yes. 18 Q. And where and when? 19 A. 1963, Lafayette College, in 20 psychology. 21 Q. And any further degrees after that? 22 A. Yes. I have an MBA with a market 23 research specialization from Baruch that I 24 obtained I think it was '77 or something like 25 that.</p>
<p style="text-align: right;">Page 59</p> <p>1 McCullough 2 of doing surveys? 3 A. About 20, 20, 25 years ago an 4 attorney asked me if I would critique a 5 survey that was done by another expert, and I 6 agreed to do that, and the judge relied upon 7 my decision and mentioned me several times or 8 relied upon my testimony, and relied upon 9 that in his decision, and he said "Ed 10 McCullough said," and he went on and 11 mentioned something Ed McCullough said, and 12 all of a sudden the phone started ringing. 13 Q. What was the name of that case? 14 A. It was a case that involved Advil 15 and -- and Motrin I believe. 16 Q. And what court was it in? 17 A. Southern District of New York. 18 Q. How long ago? 19 A. Oh, 20 to 25 years ago. 20 I think I was -- the law firm I was 21 working with at that point was (inaudible) -- 22 (Noise interruption.) 23 A. -- from Washington -- 24 THE COURT REPORTER: I couldn't 25 hear you.</p>	<p style="text-align: right;">Page 61</p> <p>1 McCullough 2 Q. Any further degrees? 3 A. No. 4 Q. Have you done teaching in an 5 academic setting? 6 A. Not on a regular basis, no. 7 Q. On an occasional basis? 8 A. I have occasionally gone to a law 9 school class for -- to talk to the students 10 on a just a one-time basis here and there. 11 Q. Have you written articles in 12 academic journals? 13 A. No. 14 Q. Your report, on the very last page 15 lists three papers that you've provided, that 16 you've given -- 17 MR. BUCHANAN: Strike that. 18 Q. Are these the papers -- is this a 19 full listing of the papers that you've 20 authored over the last ten years? 21 A. That's correct. 22 Q. And those were about ways to 23 increase survey response rates in mail 24 surveys? 25 A. That's correct.</p>

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<p>1 McCullough 2 Q. So those are about surveys 3 conducted through the mail? 4 A. Yes. 5 Q. Hard copy, snail mail? 6 A. Yeah, as they call it. Yes, snail 7 mail. 8 Q. By the way, what counts as a 9 response rate in a mail survey? 10 Do you literally compare how many 11 were mailed out versus how many were mailed 12 back? 13 A. It depends exactly what you're 14 doing. It's -- theoretically it's how many 15 completions you get based on how many people 16 who would have qualified for the interview. 17 Q. And how do you know how many would 18 have qualified? 19 A. You have to -- it's -- it depends. 20 It varies from situation to situation. I'd 21 have to try to figure it out based on how 22 many people that return, let's say, a 23 questionnaire were qualified versus how many 24 weren't, and you extrapolate that to the full 25 population, assuming the rates would stay the</p>	<p>Page 62</p> <p>1 McCullough 2 purposes, but the main purpose is it's an 3 audience measurement survey for -- primarily 4 for magazines and also for cable stations. 5 It's used as a tool for advertising agencies 6 and for -- for media companies to determine 7 audience levels. 8 Q. Have you ever heard of an 9 organization called CASRO? 10 A. Sure. 11 Q. What is it? 12 A. The CASRO we call it. That's the 13 initials, yes. 14 Q. And what is that organization? 15 A. It's a trade association of people 16 in the marketing research business. 17 Q. Are you a member of that? 18 A. Yes, we are. 19 Q. When you say "we," what do you 20 mean, we? 21 A. The company. It's a company 22 membership. It's not individual membership. 23 Q. Are you a member of any other 24 professional associations? 25 A. Yes. American Marketing</p>
<p>Page 63</p> <p>1 McCullough 2 same. 3 For instance, we do a very 4 substantial affluent survey, and we target 5 people who are supposed to have a hundred 6 thousand plus incomes, and we know how many 7 we get back from people. We don't tell them 8 that they can only respond if (inaudible) -- 9 THE COURT REPORTER: I couldn't 10 understand you. 11 A. (Continuing) We ask their income, 12 but therefore the -- we look at what 13 percentage we get back actually turn out to 14 be a hundred thousand plus, and then we 15 quickly -- we make the projection or the 16 assumption that that would have been the case 17 in the general -- in the people who didn't 18 respond, so -- 19 THE COURT REPORTER: "Who didn't 20 respond"?</p> <p>21 THE WITNESS: Who didn't respond. 22 I'll try to be clearer. I'm sorry. 23 Q. What's the purpose of the affluent 24 study? 25 A. Well, the affluent study had many</p>	<p>Page 65</p> <p>1 McCullough 2 Association, American Statistical 3 Association, the American Association of 4 Public Opinion Research, a company called 5 APOR. The company's a member of The 6 Advertising Research Foundation. There's 7 another organization that -- in the field 8 called -- C-M-O-R; we call it CMOR, and 9 that's another organization that's somewhat 10 similar to CASRO in terms of -- of research 11 quality issues and response rates. 12 Q. What is the name of your company? 13 A. It's interesting you ask that. 14 Up until the 17th of April the 15 company was Monroe Mendelsohn Research. On 16 April 17th I sold my firm to a company called 17 IPSOS, I-P-S-O-S, so our new name either is 18 or will be IPSOS Mendelsohn. They're in the 19 process of going through the name change 20 situation right now. 21 Q. You were the -- before April 17 you 22 were the president of Monroe Mendelsohn 23 Research, Inc.? 24 A. President, CEO and owner. 25 Q. How did you come to be the</p>

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<p style="text-align: right;">Page 66</p> <p>1 McCullough 2 president, CEO and owner of a company with 3 the name Monroe Mendelsohn -- 4 A. Good question. 5 Q. -- Research, Inc.? 6 A. A gentleman named Monroe 7 Mendelsohn, first name Monroe, second name 8 Mendelsohn, hired me in 1968 to work for him 9 as a project director, and after taking 10 various promotions in the company I then 11 bought the firm from him in 1978. I became 12 President in '77 under his ownership, and 13 then bought the firm then in 1978, so I've 14 owned the company for the last 30 years. 15 Q. What is IPSOS? 16 A. IPSOS is a large international 17 research organization that's headquartered in 18 Paris, listed on the Paris stock exchange. 19 It's a large company owning a lot of 20 different research companies. 21 Q. How did it come about that you sold 22 your company to IPSOS on April 17th? 23 A. Well, it's a long story, but to 24 make the short part of the story is a 25 gentleman who knew of the type of work we did</p>	<p style="text-align: right;">Page 68</p> <p>1 McCullough 2 Q. In the course of your discussions 3 with IPSOS, did you ever happen to mention 4 this particular case? 5 A. No. 6 Q. Have there -- in the various times 7 when you have submitted a report in a case 8 have there been times when your testimony has 9 been challenged? 10 A. Oh, I think my testimony is always 11 challenged. 12 Q. And have there been times when the 13 court has determined that your report should 14 be stricken, or that you should be 15 disqualified from testifying? 16 A. I don't recall any case where it's 17 been stricken or disqualified. There are 18 cases where the court has not relied upon my 19 decisions, or my report rather, but I don't 20 think I've ever been stricken or 21 disqualified. 22 Q. What cases come to mind where the 23 court expressed that it did not rely on your 24 testimony? 25 A. There was a case, a pet food case,</p>
<p style="text-align: right;">Page 67</p> <p>1 McCullough 2 and knew of our reputation, and he's been 3 quoting me for about seven years now, and 4 there were several other firms that were 5 interested in buying the firm, but they -- 6 this company, seemed to have the most need 7 for a company with our type of expertise and 8 background and type of products, so after 9 discussions with both him and the so-called 10 runner-up company I determined that this 11 company was probably the best company to sell 12 the company to. 13 Q. What was the runner up? 14 A. A company called Kantar. 15 Q. How do you spell that? 16 A. K-a-n-t-a-r. They're a division of 17 WPP, which is a humongous international firm 18 as well. 19 Q. And effective April 17 what is your 20 position at -- I forget the name. 21 A. IPSOS Mendelsohn. Right. 22 I'm still President and CEO. 23 Q. And you're continuing to be active 24 in the case -- or in the company? 25 A. Yes.</p>	<p style="text-align: right;">Page 69</p> <p>1 McCullough 2 that was years ago, which I actually think -- 3 I think Dr. Jacoby was on the other side of 4 that case and critiqued my survey, and the 5 court did not rely upon my survey in that 6 case. 7 Q. Is that the case in Kansas? 8 A. Yes. 9 Q. Something like Hills Foods? 10 A. That's correct. That's the one. 11 Well, there was another survey that 12 was done in the -- this was interesting. I 13 was working -- Dr. Jacoby was testifying in a 14 case which was Steak -- Steak 'N Bake? Steak 15 'N Shake I guess it was -- a Steak 'N Shake 16 case out in the Midwest also, where Dr. 17 Jacoby was actually the lead researcher, and 18 I had done some additional interviewing in a 19 different venue sort of following up on what 20 he had done, and I think the court rejected 21 our -- both his survey, which he was the 22 actual architect of the survey. I was just 23 the provider of interviews, but I think they 24 didn't rely upon that either. 25 There was another case, a</p>

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<p style="text-align: right;">Page 70</p> <p>1 McCullough 2 pharmaceutical case, regarding ophthalmic 3 products in Jersey where -- a dilution case 4 where the court did not rely upon my 5 testimony in that case to make their 6 decision. 7 There probably was some others, but 8 that's all that comes to mind at this point. 9 Q. Before you were contacted for this 10 case had you ever heard of adaptive lighting? 11 A. You'd asked me that before. I said 12 no. 13 Q. Do you yourself use a digital 14 camera? 15 A. I do. 16 Q. Do you do any -- do you use any 17 editing features? 18 A. On the camera itself? 19 Q. Yes. 20 A. No. 21 Q. Do you do any photo editing 22 features -- 23 MR. BUCHANAN: Strike that. 24 Q. Do you sometimes print with a 25 printer?</p>	<p style="text-align: right;">Page 72</p> <p>1 McCullough 2 Q. Do you recognize Exhibit 8? 3 A. Yes. 4 Q. What is Exhibit 8? 5 A. These are some pages from the 6 websites that I had printed out that were in 7 my folder, that I produced to you because 8 they were in my folder. 9 Q. And when you say "in my folder," 10 did you have a folder for this particular 11 project? 12 A. Yes. 13 Q. Did you have a single -- do you 14 have a single folder for this case? 15 A. I have a folder for the project, 16 which is I guess the case. 17 Q. Do you -- do you have a title on 18 your folder? 19 What do you call it? 20 A. I don't know exactly what's on it. 21 It's got a job on it is the main thing. It 22 has some type of description. It may have 23 "Kirkland & Ellis" written on it. 24 Q. I'll just call it the project 25 folder for this case.</p>
<p style="text-align: right;">Page 71</p> <p>1 McCullough 2 A. Yes, I do. 3 Q. And do you sometimes print photos 4 with a printer? 5 A. Yes, I do. 6 Q. Have you had occasion to use photo 7 editing features of a printer? 8 A. Not of a printer. I've done some 9 photo editing on the computer. 10 Q. What have you done using what tool? 11 A. What's it called? Corel is the 12 name of the program, I believe, and it's 13 Corel -- some kind of photo name, et cetera, 14 but Corel is the company. 15 And I will occasionally do some 16 editing of a photo before I print it. 17 Q. Do you have an understanding of 18 what the adaptive lighting technology does? 19 A. Just what I read in this case. 20 MR. BUCHANAN: Okay. Let me ask 21 that we mark the next exhibit. 22 ([McCullough] Exhibit 8, website 23 printouts contained in Mr. McCullough's 24 project folder, marked for 25 identification, as of this date.)</p>	<p style="text-align: right;">Page 73</p> <p>1 McCullough 2 A. Yeah. It's my project folder. 3 Q. When did you print out these 4 materials? Before designing your survey? 5 A. Well, there's a date on the bottom, 6 so I must have done it December 20th. 7 Q. And what did you go -- did you 8 yourself go and look for these materials? 9 A. These materials I actually looked 10 for. I also had one of my techie people do 11 some searching at one point in time for 12 cameras and printer material, which basically 13 resulted in finding those, the actual sheets 14 that I used in my survey. 15 Q. When your sheets (sic), are you 16 referring to the -- 17 A. Exhibit C. 18 Q. -- two fax sheets we looking at 19 earlier, one with the hundred ninety nine 20 dollar printer and the other with the 21 99-dollar printer? 22 A. Yes. To be specific, the ones that 23 are in Exhibit C. 24 So yeah, I had him go through and 25 look for -- actually, he did both looking for</p>

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<p>Page 74</p> <p>1 McCullough 2 adaptive lighting technology definitions at 3 one point, and also he looked for whether 4 from a list of -- of cameras at one point and 5 from a separate list of printers which ones 6 were still being sold, because we had a 7 larger list that we were working from, and 8 some of them were discontinued.</p> <p>9 Q. What was the larger list that you 10 were working from?</p> <p>11 Where did you get that list?</p> <p>12 A. I think Ms. Holohan gave it to me.</p> <p>13 Q. And to your understanding, what was 14 that list?</p> <p>15 A. I think it was a list of all the 16 printers, specifically I think a list of the 17 printers that were involved in this case. I 18 think it was. I'm not a hundred percent 19 sure. I think it was.</p> <p>20 Q. Do you remember, what was the form 21 of the list?</p> <p>22 Was this an interrogatory answer or 23 was it --</p> <p>24 A. Just a --</p> <p>25 Q. -- a document?</p>	<p>Page 76</p> <p>1 McCullough 2 to your work in this case. 3 A. Right. 4 Q. So let me ask you -- let me direct 5 your attention back to Exhibit number 8, and 6 let me ask you to turn to the -- one, two -- 7 fifth page of this, with the Bates number at 8 the bottom 7539349.</p> <p>9 A. Okay.</p> <p>10 Q. Do you see the statement "HP 11 adaptive lighting is built into the camera. 12 All you need to do is turn it on"?</p> <p>13 A. I do see that.</p> <p>14 Q. Do you have an understanding, where 15 does one find adaptive lighting technology in 16 HP products?</p> <p>17 A. I'm not sure I understand your 18 question.</p> <p>19 Q. What is your understanding of what 20 is adaptive lighting, and -- and where is it?</p> <p>21 A. Well, it's a software feature 22 that's implicit, that's in the camera or -- 23 or in the -- in the printer.</p> <p>24 Q. Do you have any further 25 understanding about it?</p>
<p>Page 75</p> <p>1 McCullough 2 A. It was just a -- a -- a listing of 3 all these different models. I didn't -- I 4 didn't have any writing on it, except it was 5 a list of a bunch of printers and in the 6 camera case it was a bunch of cameras.</p> <p>7 Q. And do you have that list in your 8 folder now?</p> <p>9 A. Anything I have I produced to you, 10 for the printers. For the camera one, I 11 probably -- I probably have that list at some 12 point in a folder, in a camera folder.</p> <p>13 Q. Do you have one folder for printers 14 and another printers for cameras, or do you 15 have a single folder?</p> <p>16 A. Actually, I moved over -- I had one 17 folder at one point, but then when the 18 printer -- when the cameras came out of the 19 case I kind of moved all of my printer stuff 20 into the new folder. So it's -- the new job 21 name came of 4462, so I had pretty much moved 22 all the -- all the printer stuff from 4462 23 just to keep it separate from the camera 24 stuff, which was in the old folder.</p> <p>25 Q. So you now have two folders related</p>	<p>Page 77</p> <p>1 McCullough 2 A. No. 3 Q. Do you have any understanding about 4 how often is it used? 5 A. I would not know that. 6 Q. Do you have any understanding of 7 the --</p> <p>8 MR. BUCHANAN: Strike that.</p> <p>9 Q. Was there anything in particular 10 about this Exhibit 8 that was of significance 11 to you as you were preparing your work?</p> <p>12 A. I don't recall exactly how these 13 particular pages entered into it. I think 14 it's just I printed out a bunch of these at 15 one point in time, and I stuck them in my 16 folder, and therefore I produced them. I 17 don't think they have any specific 18 significance.</p> <p>19 MR. BUCHANAN: Can we mark the next 20 exhibit?</p> <p>21 ([McCullough] Exhibit 9, printouts 22 from Internet, marked for 23 identification, as of this date.)</p> <p>24 THE WITNESS: Thank you.</p> <p>25 Q. Do you recognize Exhibit 9?</p>

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<p>1 McCullough 2 THE VIDEOGRAPHER: Mr. Buchanan 3 (indicating)? 4 MR. BUCHANAN: (Donning mic). 5 A. I'm not sure why these are 6 separated from the others, but these look 7 like two more pieces of papers that I guess, 8 since they have the same date on it, I must 9 have had them in my folder as well but are 10 separated from these others. I don't know 11 why they're separated. 12 Q. Do you remember anything of 13 particular significance in this one that -- 14 that you considered in doing your work? 15 A. I don't recall anything specific 16 about this particular one, no. 17 Q. Have you yourself ever used the red 18 eye function of photo editing? 19 A. I've used it in my Corel computer 20 corrections. That's the only time I 21 personally have used it. 22 Q. Have you done -- in your own use of 23 the Corel function, is there any other 24 editing that you've done besides red eye? 25 A. I've done cropping of the photo. I</p>	<p>Page 78</p> <p>1 McCullough 2 both the cameras and printers that have 3 adaptive technology in them. 4 Q. What do you mean, that the Corel 5 tool is more user oriented? 6 A. Well, I have to actually physically 7 make the decisions as to how much I want to 8 lighten, how much I want to contrast, how 9 much I want to -- what I want to do with the 10 red eye, how much I want to crop. It's very 11 -- it's very oriented to me making all the 12 decisions. There's no automatic -- automatic 13 process. I have to decide on everything. 14 Q. Do you have an understanding as to 15 whether the adaptive lighting feature of the 16 HP products operates automatically? 17 A. That's my assumption. 18 Q. So can I ask you to look at 19 Exhibit 8 again? Can you look to that same 20 page we were looking at, Bates number 21 7539349? 22 A. Okay. 23 Q. Do you see it says "HP adaptive 24 lighting is built into the camera. All you 25 need to do is turn it on"?</p>
<p>Page 79</p> <p>1 McCullough 2 may have done some enlargements at times. 3 It's possible. 4 Q. Does your Corel product have a tool 5 that allows to enhance contrast or lighting? 6 A. Yeah. 7 I've also done that. I've made -- 8 I've changed contrast and brightness on some 9 pictures occasionally. 10 Q. Do you understand whether the Corel 11 product has a feature comparable to the 12 adaptive lighting, as you understand it? 13 A. I don't understand enough about the 14 software to be able to say it's the same 15 technology. 16 Q. From the user point of view, does 17 your Corel photo tool have a function that 18 allows you to do what you understand a user 19 can do with adaptive lighting? 20 A. My assumption would be -- again, 21 just acting as a layperson now, is that the 22 function I use on Corel is much more user 23 oriented, and my assumption is that the 24 other, the feature of the adaptive lighting, 25 is much more automatic in terms of the --</p>	<p>Page 81</p> <p>1 McCullough 2 A. Okay. 3 Q. Do you have an understanding 4 whether adaptive lighting runs automatically 5 or whether the user has to turn it on? 6 A. Well, based on this, obviously it 7 seems you have to turn it on, but I would 8 guess also once you turn it on, you can leave 9 it on. 10 Q. And do you have an understanding 11 when -- as to when adaptive lighting is 12 provided in the HP printers, whether it's 13 automatic or whether the customer has to turn 14 it on? 15 A. I don't know. 16 MR. BUCHANAN: Can we mark this one 17 next, please? 18 ([McCullough] Exhibit 10, printout 19 from Internet, marked for 20 identification, as of this date.) 21 Q. Is Exhibit 10 another page from 22 your folder? 23 A. Yes. 24 Q. Do you believe that you or someone 25 in your office printed this out as well?</p>

21 (Pages 78 to 81)

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<p>1 McCullough 2 A. Yes. 3 Q. The camera glossary here says 4 "Adaptive lighting technology, an HP Real 5 Life technology that automatically," so and 6 so. Do you have an understanding what is the 7 relationship between the title Real Life 8 technology and the title adaptive lighting 9 technology? 10 A. No. 11 MR. BUCHANAN: Can we mark the next 12 one, please? 13 ([McCullough] Exhibit 11, printout 14 from Internet, marked for 15 identification, as of this date.) 16 THE WITNESS: Thank you. 17 Q. Is Exhibit 11 also a page from your 18 folder? 19 A. If you're producing it to me and I 20 produced it to you, it must be, but I don't 21 -- just looking at it, I can't recall, but it 22 probably is. 23 Q. But there's a Bates number POL, 24 which indicates to me that it was produced 25 (speaking simultaneously) --</p>	<p>Page 82</p> <p>1 McCullough 2 have produced to you. 3 Q. Now, I see some handwriting on the 4 bottom left, and I don't know who wrote it 5 there. It looks like it says "see 6 attachment." Is that your handwriting? 7 A. No. I would assume that's the 8 person -- my tech person, who must have 9 printed this out. 10 Q. And on that assumption, what do you 11 understand is the attachment referred to? 12 A. It might just be this second page 13 that's there? 14 MR. BUCHANAN: Let me mark one 15 more. 16 ([McCullough] Exhibit 13, printout 17 from HP website, marked for 18 identification, as of this date.) 19 Q. I don't know whether Exhibit 13 is 20 from your folder or not. 21 Do you recognize Exhibit 13? 22 A. (Perusing document) There's so many 23 things on adaptive lighting technology, I 24 don't -- it very well could be from my 25 folder, but I don't -- I don't -- I don't</p>
<p>Page 83</p> <p>1 McCullough 2 A. I'm not -- I'm not doubting it. I 3 just don't recall it. 4 Q. This description here appears to 5 refer to cameras. First paragraph, second 6 line, "some HP cameras," second paragraph 7 (inaudible) -- 8 (Discussion off the record.) 9 Q. -- "Select HP R series digital 10 cameras." Would you agree with me that this 11 page describes cameras, not printers? 12 A. It does reference printers in the 13 second paragraph, yes. 14 (Reading) Yes. I'd say yes. 15 MR. BUCHANAN: One more, please. 16 ([McCullough] Exhibit 12, HP 17 website printout from Mr. McCullough 18 project folder, marked for 19 identification, as of this date.) 20 Q. Is this also a page from your 21 folder printed out on December 20th, 2007? 22 MS. KINGSBURY: I just want to say 23 there are two pages to this exhibit. 24 A. Since it has a date on it with my 25 Bates number, obviously this is one I must</p>	<p>Page 85</p> <p>1 McCullough 2 recognize it per se, but it could be. 3 Q. Do you see the first question, 4 "What is HP Adaptive Lighting Technology"?</p> <p>5 A. Yes.</p> <p>6 Q. And do you see the first sentence, 7 "HP adaptive-lighting-technology is a 8 breakthrough technology that permits digital 9 cameras," and so forth?</p> <p>10 A. Um-hm.</p> <p>11 Q. Have you seen that phrase, 12 "breakthrough technology," in any of the 13 other materials we've looked at so far this 14 morning?</p> <p>15 A. I can't say I have, but I really 16 haven't seen the materials you showed me 17 previously.</p> <p>18 Q. Do you recall seeing that word 19 breakthrough or the phrase breakthrough 20 technology in any of the other materials that 21 you looked at in the course of designing your 22 survey?</p> <p>23 A. I may very well have, but I don't 24 remember this at this point, sitting here.</p> <p>25 Q. Let me ask you to turn to the</p>

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<p style="text-align: right;">Page 86</p> <p>1 McCullough 2 second page, and do you see the question, 3 second question down, "Did HP invent this 4 technology"?" 5 A. Okay. 6 Q. Let me direct your attention to the 7 second paragraph there. "The first digital 8 HP Adaptive Lighting Technology algorithm was 9 described in a 1983 patent issued to Polaroid 10 Corporation," open quote, "RETINEX," close 11 quote. "This patent has since expired." 12 Do you have an understanding as to 13 what is the technology basis of the adaptive 14 lighting feature that you were testing in 15 your survey? 16 A. No. 17 Q. Do you have any understanding one 18 way or another about what RETINEX is? 19 A. I do not. 20 Q. Do you have any understanding one 21 way or another about the particular patent 22 that is asserted by Polaroid in this case? 23 A. I do not. 24 Q. Do you have any other understanding 25 about what's the technology or technologies</p>	<p style="text-align: right;">Page 88</p> <p>1 McCullough 2 Q. Well, actually, I -- I'm not sure. 3 Let me try to be more clear in my 4 question? 5 A. Okay. 6 Q. What is the precise statement of 7 objective that you were trying to accomplish 8 in your survey? 9 What's the analytic question that 10 you were seeking to address? 11 Is it stated in the report section 12 of your report? 13 A. Well, it's part of the conclusions. 14 Q. Please show me where. 15 A. Here. (Perusing document) Well, 16 actually, probably it's -- it's better stated 17 in the background section, that -- 18 Q. What page, please? 19 A. Page four. I'm sorry. 20 "Monroe Mendelsohn Research, MMR, 21 was asked by attorneys at Kirkland & Ellis, 22 counsel to Polaroid, to design and conduct 23 research to determine consumers's perceived 24 value of Hewlett-Packard Adaptive Lighting 25 Technology feature, used in printers."</p>
<p style="text-align: right;">Page 87</p> <p>1 McCullough 2 contained in the adaptive lighting products 3 of HP? 4 A. I do not. 5 Q. What was the question that you set 6 out to address in the initial design of your 7 surveys in this case? 8 A. The -- the value that consumers 9 would -- would put on the adaptive lighting 10 technology features. 11 Q. And who -- who did -- who designed 12 this specific question that you -- that you 13 asked? 14 A. I did. 15 Q. And what is the specific question 16 that you sought to address? 17 A. If I'm going to be specific, I 18 should probably read it. 19 Q. Please. 20 A. I'll go to my Exhibit 6. In 21 Exhibit A -- I'm going to the main 22 questionnaire. 23 Well, there's a preamble to this. 24 You want me to read the preamble, or just the 25 actual question?</p>	<p style="text-align: right;">Page 89</p> <p>1 McCullough 2 Q. And who put that question? Did you 3 put the question, or did Kirkland & Ellis put 4 the question? 5 A. "Put the question"? I'm not sure 6 that word meaning, put -- 7 Q. Who -- were you asked by Kirkland & 8 Ellis to determine what is stated here? 9 A. I was asked by them to -- yes. 10 That's what I'm -- that's what I'm stating 11 here; they asked me to determine that. 12 Q. And what do you mean by "consumers' 13 perceived value of the feature"?</p> <p>14 A. How much they think that is worth 15 in terms of the price to them. 16 Q. And what do you mean by "the 17 feature used in printers"?</p> <p>18 A. Well, that's just -- just -- just 19 determining -- that's just explaining the 20 fact that it's -- it's a feature that is used 21 in printers, and that's the mechanism on 22 which I am doing the interview.</p> <p>23 Q. Is it -- in order to determine 24 perceived value, is it of interest to 25 determine how often consumers who have the</p>

23 (Pages 86 to 89)

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<p>1 McCullough 2 printers use that feature? 3 A. I don't think that's a necessary 4 component. That's an additional piece of 5 information. 6 Q. Is it -- in determining consumers' 7 perceived value of the feature, is it of 8 interest to try and project how often they 9 think they will use it? 10 A. Again, that's something that they 11 would take into consideration potentially 12 when they're giving answers to the questions. 13 That's not something that I would seek to 14 find out separately. 15 Q. Are you aware of any sorts of 16 information of how often owners of HP 17 printers actually do use this feature? 18 A. I'm not. 19 Q. Are you aware of any -- 20 MR. BUCHANAN: Strike that. 21 Q. Did you consider conducting a 22 survey of people who actually owned them? 23 A. No. 24 Q. Are you aware of any information on 25 as to whether those who own the printers and</p>	<p>Page 90</p> <p>1 McCullough 2 about do anything, so I could design a survey 3 to try to elicit that information, but it 4 would depend upon a number of factors, you 5 know, in terms of whether people are using 6 the feature actually even know they're using 7 the feature, in terms of whether they 8 understand if they had to reprint the 9 product, reprint it, at least (inaudible) 10 printing for one reason versus another. 11 There would be a lot of issues involved, but 12 I can design surveys to test for virtually 13 anything. 14 Q. In the -- do you have any current 15 plans to do any further surveys related to 16 this case? 17 A. No, I do not. 18 Q. And are there any others besides -- 19 that you've done in this case besides the 20 printers and cameras that you've told us 21 about? 22 A. No. There are no others. 23 Q. Before you set off on those surveys 24 did you do before -- in advance any pre-tests 25 or focus groups or any other preliminary</p>
<p>1 McCullough 2 use this feature are caused to print photos 3 more often than they would have absent the 4 feature? 5 A. I'm not aware of that either way. 6 Q. And are you aware of any source of 7 information on that subject? 8 A. No, I'm not. 9 Q. If we asked you to think about it, 10 can you design a survey to study that 11 question? 12 A. The question of -- once again? 13 Would you repeat it? 14 Q. Can we read it back, and see how 15 well did I frame the question. 16 A. Good test. 17 (Discussion off the record.) 18 (Record read, as follows: 19 "Question: Are you aware of any 20 information on as to whether those who 21 own the printers and use this feature 22 are caused to print photos more often 23 than they would have absent the 24 feature?"") 25 A. No. I can design surveys to just</p>	<p>Page 91</p> <p>1 McCullough 2 work? 3 A. No, I did not. 4 Q. How did you go about -- 5 MR. BUCHANAN: Strike that. 6 Q. Of the -- of the past surveys that 7 you've done either in business settings or in 8 litigation, are there any of the past ones 9 that are particularly similar to the one that 10 you did here? 11 A. As I sit here I can't think of any. 12 No. 13 Q. Is this -- is the design of this 14 survey particularly different from ones that 15 you have done in the past? 16 A. By definition of "last," last 17 answer, yes. Most of the surveys I work on 18 in a litigation context are either trademark 19 surveys or false advertising surveys, so this 20 kind of survey is somewhat different than 21 what I usually do. So yes, it is different. 22 Q. And is this the first time that 23 you've done a perceived value survey for 24 litigation purposes? 25 A. Probably is, yes.</p>

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<p>1 McCullough</p> <p>2 Q. Have you done perceived value 3 surveys in a non-litigation setting?</p> <p>4 A. I've done surveys over the years 5 that relates to respondents' perception of 6 costs, and I've done some experimentation in 7 that area many years ago. Nothing specific 8 comes to mind, but I've worked in that area 9 in years back, on commercial work.</p> <p>10 Q. How did you -- given the survey 11 objective that you showed me on page four, 12 how did you go about designing the questions 13 that you would ask and the way that you would 14 ask them?</p> <p>15 A. Based on doing this type of design 16 work for close to 40 years, close to 40 years 17 now and more specifically in the last 35 18 years which I've been doing this, when you 19 have an issue that comes up you basically -- 20 the question framed just comes to mind just 21 based on your experience level. So I knew 22 what the issue was, and therefore I just 23 developed the question I thought addressed 24 the issue.</p> <p>25 Q. And so is there questions stated on</p>	<p>Page 94</p> <p>1 McCullough</p> <p>2 and the other would be for if it would cost 3 less.</p> <p>4 Q. And in the upper right-hand corner 5 of page M1 there's a Figure 4-1. What does 6 that refer to?</p> <p>7 A. Yours says four one. Mine says 8 four two.</p> <p>9 That's the rotation punch. That 10 would coordinate with the color.</p> <p>11 Q. Okay. So question one on page M1 12 is the main question of the survey?</p> <p>13 A. Well, I wouldn't say the main 14 question. This is the first question. It 15 needs to be taken as a whole.</p> <p>16 Q. Okay. Tell me what you were 17 seeking to accomplish by this question.</p> <p>18 A. I think it's pretty self-evident.</p> <p>19 I was explaining to people -- first 20 they saw the description of the printer, 21 which they were able to look at and read and 22 keep in front of them if -- during the 23 interview. And then I asked them the 24 question that's right here. I can read it, 25 but I don't think it's necessary to read the</p>
<p>Page 95</p> <p>1 McCullough</p> <p>2 -- when you say "the question," where should 3 I look to see the question? Page six?</p> <p>4 A. Well, if you go to page -- well, if 5 you go to Exhibit A, and you go to the main 6 questionnaire, there's actually a series of 7 questions there, with a preamble to it, and 8 -- are you at that? It's at page M1, if you 9 want to look at the first survey. The other 10 survey, the 4462, is virtually the same, so 11 either one of these would suffice. It's the 12 preamble plus questions one, two and three.</p> <p>13 Q. By the way, to help me orient, M1, 14 does the M there refer to main questionnaire?</p> <p>15 A. Yes, main questionnaire page one.</p> <p>16 Q. And on the earlier thing, S1, does 17 that refer to S for screener?</p> <p>18 A. That's correct.</p> <p>19 Q. And some of these say "green" and 20 some of say "blue." Why is that?</p> <p>21 A. That's probably the rotation scheme 22 for question one. There was two versions of 23 question one in terms of the order in which 24 they were read, and one color was for "price 25 would be the same" and -- when it was first,</p>	<p>Page 95</p> <p>1 McCullough</p> <p>2 question, unless you do. And then after 3 reading the question I wanted to find out if 4 they thought that the printer model did not 5 have the adaptive lighting technology feature 6 that I just described above in the previous 7 paragraph, if they thought the price would be 8 the same as the model with the adaptive 9 lighting technology feature or would cost 10 less than the model with the adaptive 11 lighting feature.</p> <p>12 Q. Did you consider asking people what 13 they would be willing to pay for a printer 14 with this feature?</p> <p>15 A. You can -- not in that form. I 16 think you can back into that from this 17 (inaudible) a more appropriate way of asking 18 the question.</p> <p>19 Q. Why do you think so?</p> <p>20 A. Just my experience.</p> <p>21 Q. Did you give active consideration 22 to asking people "How much would you be 23 willing to pay for this feature"?</p> <p>24 A. I don't know if I thought of it at 25 the time.</p>

25 (Pages 94 to 97)

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<p style="text-align: right;">Page 98</p> <p>1 McCullough 2 I'm not sure if that's the right 3 way to go, though. 4 Q. Any -- anything further to say on 5 why you think that is not the right way to 6 go? 7 A. I just think this is a more direct 8 way of getting that information. 9 Q. Have you seen surveys in a business 10 setting or litigation setting where people 11 are asked what would you be willing to pay 12 for something? 13 A. I'm sure I've seen those over the 14 years, yes. 15 Q. Would you think that would be a 16 less direct way to ask the question here? 17 A. Well, in this context we're talking 18 about showing them a product and explaining 19 the fact that it has a certain feature to it, 20 and that's the existing product as it 21 currently stands, so the more logical 22 question to ask them is if -- if this feature 23 were taken away from this, how much less do 24 you think it would cost. If we're starting 25 with the actual product with the feature in</p>	<p style="text-align: right;">Page 100</p> <p>1 McCullough 2 A. March 5th, and, you know, several 3 days before that I probably started writing 4 the report. Again, I don't remember the 5 exact dates on these things. That's the way 6 I normally do things. So it was probably 7 several days before the actual report was 8 signed. 9 Q. So let me ask you to look at the 10 Verbatims section, section E. 11 A. Okay. 12 Q. And I'll ask you to start at the 13 back. 14 A. Okay. 15 Q. So let me -- let me look at the 16 second to last page. These are Verbatims 17 about the HP Office Jet 5610. Do I have that 18 right? 19 A. Yes, you do. 20 Q. And this is the printer that's a 21 price, after rebate, 99.99. 22 A. Correct. 23 Q. In the bottom half of the page you 24 have some that say "Following response not in 25 mean/median. Q2 equals questionable</p>
<p style="text-align: right;">Page 99</p> <p>1 McCullough 2 it, and then we're saying, "Well, if you had 3 -- if you had a product that didn't have this 4 feature, how much less would it cost" is the 5 more logical extension for me, from working 6 from a product that already has a feature. 7 So that's different than the hypothetical 8 that you're raising, in terms of other 9 issues. I think this is a much more direct, 10 natural way to ask people a question. 11 Q. Did you consider asking people how 12 much would you pay to get a printer with the 13 feature, how much would you pay would you pay 14 to get a printer without the feature? 15 A. No, I don't think -- again, I did 16 what I did here. Again, what's here is done, 17 and this is what I thought would be the 18 better way of getting at that. 19 Q. And I may have asked you this 20 before, but when did you write your report; 21 in a small number of days before its date, is 22 that correct? 23 A. That's -- that's -- that's correct. 24 Q. So page eight tells me it's dated 25 March 5th?</p>	<p style="text-align: right;">Page 101</p> <p>1 McCullough 2 response." Let me see if I understand this. 3 Questionnaire -- as I understand it, 4 questionnaire 175, the person said it would 5 cost less, and a hundred fifty dollars less. 6 A. Right. 7 Q. And you wrote that was a 8 questionable response, not to be included. 9 Yes? 10 A. That's correct. 11 Q. Okay. Why is that a questionable 12 response, not to be included? 13 A. Well, if the whole thing cost a 14 hundred dollars roughly, obviously a hundred 15 fifty dollars less would be minus \$50, so 16 they're not going to pay you -- they're not 17 going to pay you to take the printer away. 18 Q. And similarly, to pick one, 19 questionnaire a hundred twelve said costs 20 less, a hundred dollars less, and that, too, 21 would be questionable, because then you would 22 be getting the printer for negative one 23 penny? 24 A. Right. 25 Q. And similarly, questionnaire 468</p>

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<p>Page 102</p> <p>1 McCullough 2 said it would cost less, \$90 less, and you 3 believe that that also was a questionable 4 response, because then the printer would only 5 be \$10? 6 A. Yes. 7 Q. Now, let's turn to the previous 8 page. Questionnaire 314, the person said 9 cost less, \$80 less, which would make the 10 printer cost \$19.99. Why did you keep that 11 one in? 12 A. That was actually a judgment call. 13 At some point I have to cut off as to what I 14 thought was completely unreasonable and 15 things that are possible. It's possible that 16 some of these people also -- you know, it 17 could have been excluded. It's really a 18 judgment call on my part, where I cut off. 19 Q. And how about, oh, let's pick 20 questionnaire 381, costs less, \$50 less. Why 21 keep in \$50, half the price of the printer? 22 Is that again a judgment call? 23 A. Well, I think when you get to that 24 area it's not -- you know, it's not -- it's 25 not unreasonable that a person could think</p>	<p>Page 104</p> <p>1 McCullough 2 lighting. If they had said \$50 less for a 3 printer without red eye removal and \$50 less 4 for a printer without adaptive lighting, 5 would that be a reasonable response or an 6 unreasonable response? 7 A. I didn't ask that question, so I 8 mean I don't know what the answer would have 9 been, and I can't speculate as to what 10 respondents would have said. I didn't ask 11 those two questions. I only asked one 12 question. 13 Q. So my question is not to speculate 14 about what they say, but let's suppose a 15 particular questionnaire came back with the 16 answers that I've described. 17 A. Well, it couldn't happen that way, 18 because we didn't ask about red eye removal. 19 Q. Suppose you did. 20 You could design a survey to ask 21 about red eye removal, yes? 22 A. I could. 23 Q. And you could design a survey that 24 would ask about both red eye removal and 25 adaptive lighting.</p>
<p>Page 103</p> <p>1 McCullough 2 that. If they think that this technology is 3 particularly important, that it's a very 4 important function for them, that's not 5 unreasonable. When you get up to being above 6 \$80 it's, from my point of view, very 7 unreasonable, and maybe even at 79 or \$80 or 8 \$75, maybe some those aren't too reasonable 9 either. 10 At some point you just have to make 11 a judgment as to, even though respondents are 12 answering the questionnaire, and it should be 13 a very clear question to them, you have to 14 make a judgment as to where you cut off and 15 say anything above this is not reasonable. 16 And it wouldn't have made any real 17 significant difference if I take -- took some 18 of those from -- that were in the 80- or 19 79-dollar area and I put them in the back and 20 try to do the numbers. It's not going to 21 change the numbers very much. So it's a 22 judgment call. 23 Q. Now, suppose you had asked people 24 about the perceived value of the red eye 25 removal and the perceived value of adaptive</p>	<p>Page 105</p> <p>1 McCullough 2 A. I could. 3 Q. And if you did that, wouldn't it be 4 reasonable to expect that a customer would 5 give some dollars related to red eye removal 6 and some dollars related to adaptive 7 lighting? 8 A. It's possible that they could do 9 that, and I don't know what answers they 10 would give me. 11 Q. And suppose that they -- that one 12 particular person gave you the answer that 13 I've outlined in my hypothetical question. 14 A. Right. 15 Q. And the hypothetical question 16 involves a person who responded that lacking 17 red eye removal, it would cost less, \$50 less, 18 and lacking adaptive lighting, it would cost 19 less, \$50 less. 20 A. Um-hm? 21 Q. Would that be a reasonable response 22 or an unreasonable response? 23 A. No, I would take that out as being 24 unreasonable. 25 Q. Because the total would be a</p>

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<p style="text-align: right;">Page 106</p> <p>1 McCullough 2 hundred dollars, and that would be the whole 3 price. 4 A. Correct. 5 Q. And let's look, if we -- just 6 looking at the fact sheet on the 5610, you'll 7 agree with me, won't you, that the printer 8 has a number of features? It has -- 9 Can we take a look at that? 10 A. Sure. 11 That's number C? Okay. 12 Q. The first bullet says that it 13 "prints in copies up to 20 pages per minute 14 in black and up to 13 per minute in color." 15 A. Okay. 16 Q. So that's one feature of the 17 printer that might be of interest to some 18 people, yes? 19 A. Well, I think by definition, every 20 printer has a speed, so I'm not sure if 21 that's an extra feature. That looks like 22 it's just a mechanical description of the 23 printer printing. 24 Q. The next one says that it copy -- 25 "automatically copies and scans faxes."</p>	<p style="text-align: right;">Page 108</p> <p>1 McCullough 2 is to them, but even, you know, assuming that 3 you could do that, and it would be a 4 reasonable task, which I'm not sure it would 5 be, it's possible that the people could 6 decide values to that, and I don't know what 7 the value would be, though. 8 Q. Given all the features that this 9 printer has as outlined on the fact sheet, 10 isn't it unreasonable on its face to assert 11 that the adaptive lighting feature in 12 particular accounts for \$50 of the hundred 13 dollars of value of the printer? 14 A. It's in the eyes of beholder. 15 That's what the consumer actually told me 16 they thought it was worth. 17 Q. In your judgment, that's not 18 unreasonable on its face. 19 A. Not unreasonable on its face, no. 20 Q. If you -- 21 MR. BUCHANAN: Strike that. 22 Q. From your own experience in using 23 devices of this kind, do you find that 24 unreasonable, \$50 out of the hundred for that 25 one feature?</p>
<p style="text-align: right;">Page 107</p> <p>1 McCullough 2 That's a feature that might be of interest to 3 some people, yes? 4 A. Yes, but it also is implicit in an 5 All-In-One. That's what an All-In-One means. 6 (Discussion off the record.) 7 Q. So to some people it might be 8 particularly of interest that this is an 9 All-In-One as opposed to a stand-alone 10 printer or a stand-alone copier or a 11 stand-alone fax machine. 12 A. Right. 13 And that's in the title of the 14 printer. 15 Q. Yes. 16 So there are a variety of features 17 that you could ask about in a survey, yes? 18 A. Yes. 19 Q. And if you did ask about, let's 20 say, ten features, would it be reasonable to 21 expect that people would have assigned some 22 dollar number to each of the ten? 23 A. I'm not sure that the ten might be 24 somewhat overwhelming to people in terms of 25 trying to come up with their -- the value it</p>	<p style="text-align: right;">Page 109</p> <p>1 McCullough 2 A. I really don't have -- it's -- it's 3 -- I can't approach this anymore as a 4 consumer, because I've gotten too involved in 5 it, so I really can't answer that. 6 Q. Let me ask you to turn back to the 7 main section of the report, and let me ask to 8 look at page eight. 9 A. Okay. 10 Q. If I understand this correctly, for 11 the people who were asked about the 12 Photosmart C6180 printer -- 13 MR. BUCHANAN: Strike that. 14 Q. The -- the left column reports to 15 me findings of the people who were asked 16 about that printer, yes? 17 A. The C6180, correct. 18 Q. And that had a price of one penny 19 less than \$300. 20 A. That's correct. 21 Q. And if I look down at the bottom, 22 the median dollar amount answer from the 23 respondents as you calculated was \$50. 24 A. That's correct. 25 Q. And then on the right reports the</p>

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<p>Page 110</p> <p>1 McCullough 2 answers about the Officejet 5610, which had a 3 price, after rebate, of one penny less than a 4 hundred dollars; is that right? 5 A. That's correct. 6 Q. And the median that's reported to 7 you was \$20. 8 A. That's correct. 9 Q. Why would I pay \$50 for a feature 10 in one printer if I could get it for \$20 in 11 another printer? 12 A. Well, of course, you have to 13 recognize that these are completely different 14 respondents that are reacting to completely 15 different stimuli, and it's apparent from the 16 results is that people are looking at this 17 feature as being a certain value relative to 18 the total price, and that's why I put down 19 the bottom on the next line that the percent 20 of price turns out to be about the same in 21 each case, 17 or 18 percent, which tends to 22 suggest that respondents are saying, well, 23 this is a feature that's worth, on average, 24 17, 18 percent of the price of the printer. 25 Q. So as you would -- based on your</p>	<p>Page 112</p> <p>1 McCullough 2 that we saw on the main survey questionnaire, 3 that question was the same for both groups, 4 correct? 5 A. Yes. 6 Q. So they were both told the same 7 thing about the adaptive lighting feature. 8 A. That's right. 9 Q. As you had a chance to think about 10 the results of your survey applying to your 11 experience, is there any other driver that 12 you would identify as a main component of 13 driving these results? 14 A. Driver -- other driver as -- which 15 one are you referring to? 16 Q. You told me that one of the main 17 drivers is view this feature in the context 18 of the overall price for the printer. 19 A. Right. 20 Q. Any other major driver? 21 A. My -- my assumption in looking at 22 the results is people are making a judgment 23 as to what value this feature has to them, 24 and they are putting it in proportion to the 25 price of the total printer.</p>
<p>Page 111</p> <p>1 McCullough 2 experience, as you would understand what's 3 driving these results, the main driver is 4 people view the value of the feature in the 5 context of the price of the printer as a 6 whole? 7 A. Yes. 8 Q. So when the price of the printer is 9 reduced, then they perceive the value of that 10 feature as reduced. 11 A. Well, yes, except the price of the 12 printer's not reduced; it's a different 13 printer. When you have a different printer 14 at a lower price, it's going to result in a 15 lower expectation of what the -- how much 16 less it would cost. 17 Q. And you showed me the -- so one 18 group of people were shown the fact sheet for 19 the 300-dollar printer -- 20 A. Yes. 21 Q. -- and the other group of people 22 were shown the fact sheet for the 100-dollar 23 printer; is that right? 24 A. Yes. 25 Q. And then the question number one</p>	<p>Page 113</p> <p>1 McCullough 2 Q. Do you believe that the people who 3 were respondents had any experience in 4 themselves setting prices for products? 5 A. Setting prices? 6 Q. Yes. 7 A. No. 8 Q. By the way, did you use a 9 subcontractor firm to set up the actual 10 interviewers? 11 A. All of the interviewing that's done 12 in malls is actually done by subcontract. 13 Q. Did you have a single subcontractor 14 or multiple -- 15 A. No -- 16 Q. -- for the various malls? 17 A. -- multiple subcontractors. 18 Q. And are their names stated 19 somewhere? 20 A. I don't know. 21 Q. Do you remember their names? 22 A. No, because I don't deal with them 23 directly; my field director does. 24 Q. Who is your field director? 25 A. Tom Jasorka, J-a-s-o-r-k-a.</p>

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<p>1 McCullough</p> <p>2 Q. And have you yourself been to the 3 particular malls where these things were 4 done?</p> <p>5 A. I didn't go there during this 6 interviewing process because I would not 7 normally do that.</p> <p>8 But there's one mall we use -- 9 let's see. Is Trumble being used here? Go 10 back and look. (Perusing document) I happen 11 to live not that far from Trumble Mall, so I 12 may have been there, but -- yes, Trumble 13 Connecticut was used as a mall. So I've been 14 to the Trumble mall. I have not been to -- I 15 don't know, maybe 15 years ago I may have 16 gone to the mall in Atlanta, but I haven't 17 recently been there. The Trumble mall I've 18 been to as a consumer but not in the context 19 of doing these interviews.</p> <p>20 Q. So let me ask you a question about 21 page 6 of your report, and the section 22 entitled "Interview"?</p> <p>23 A. Okay.</p> <p>24 Q. It says "After completing the 25 screening process respondents were taken to a</p>	<p>Page 114</p> <p>1 McCullough</p> <p>2 two?</p> <p>3 A. There's a lot of page twos there.</p> <p>4 Q. After Exhibit B there's a page with 5 no number, and next says "Page 2."</p> <p>6 A. Okay.</p> <p>7 Q. At the bottom, under "Method of 8 Interviewing" --</p> <p>9 A. Okay.</p> <p>10 Q. -- it says "All respondents are to 11 be screened in the main mall. All qualified 12 respondents are to be taken to a separate 13 area off the main mall." What does "separate 14 area" refer to here?</p> <p>15 A. That's a generic description that's 16 used that is kind of boilerplate. The 17 "separate area" turns out, though, to be -- 18 it's not a cordoned off area, it's not a 19 screened-off area on the main mall, it's 20 actually in the offices of the interviewing 21 service that's there. These are permanent, 22 established mall interviewing services that 23 do this on a full-time basis. It is not a -- 24 it's not like setting up a partition or 25 something like that.</p>
<p>Page 115</p> <p>1 McCullough</p> <p>2 private room" --</p> <p>3 A. Yes.</p> <p>4 Q. -- "in the interviewing facility."</p> <p>5 A. Yes.</p> <p>6 Q. In the mall that you've been to, 7 the one in Connecticut, is there a private 8 room?</p> <p>9 A. In all of the malls that we use, 10 that we used in this study, there's an 11 interviewing area that is a -- a room or an 12 office, actually, that is attached to the 13 mall, usually out of the main part of the 14 mall, and in that, depending on which 15 facility it is, individual cubicles or 16 individual private rooms, depending on the 17 facility, where these interviews are 18 conducted. They're always done in an area 19 which is private and where interviewers can't 20 hear -- respondents can't hear the interviews 21 being done in other parts of the office.</p> <p>22 Q. Let me ask you to turn to 23 Exhibit B --</p> <p>24 A. Okay.</p> <p>25 Q. -- the page that's page numbered</p>	<p>Page 117</p> <p>1 McCullough</p> <p>2 Q. And tell me, what do you mean, it's 3 a permanent facility?</p> <p>4 A. These are full-time businesses, 5 very substantial businesses that do 6 interviewing on a regular basis by 7 subcontract, for many, many research firms in 8 the United States, and they have permanent 9 facilities there. They have a permanent 10 office that's in the mall. Just like 11 somebody has a store, they have an office. 12 Usually it's down a back corridor which 13 doesn't have retail, you know, facings, 14 because it's not worth as much from a space 15 point of view. And in that office -- they 16 vary somewhat, but they have either 17 individual offices or individual cubicles for 18 interviewing, and they're set up just for the 19 purpose of doing interviews.</p> <p>20 Q. And there's one of those in each of 21 the malls that were the venues for your 22 study?</p> <p>23 A. Yes, that's correct.</p> <p>24 Q. So the people who were in those 25 malls, people who frequent those malls may</p>

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<p>1 McCullough 2 have seen these interviewers going around 3 from time to time. 4 A. It's possible, sure. 5 Q. Is there -- are some types of 6 people more likely to be willing to be 7 intercepted and participate in a mall 8 interview, and other people less likely to be 9 willing to be intercepted and participate in 10 that? 11 A. The answer to that question 12 obviously is yes. 13 Q. And tell me a little bit about what 14 kind of people are more likely and what kind 15 of people are less likely. 16 A. Well, obviously people that are in 17 a hurry or have a screaming kid on their hand 18 is not going to be too happy to sit down for 19 an interview. So, you know, what we do is to 20 try to offset the potential for maybe more 21 females than males being interviewed, as we 22 screen people in proportion to their age and 23 sex into six categories that represent the 24 distribution of people in those six 25 categories in the U.S. population, in the</p>	<p>Page 118</p> <p>1 McCullough 2 men do. 3 Q. Have you calculated for yourself 4 what is the response rate for your survey? 5 A. In all intercept study, we can't 6 calculate response rate. 7 Q. And why is that? 8 A. Because there's a certain selection 9 process. When interviewers are walking up to 10 somebody, you don't really know if they're 11 qualified, not qualified, or if they can even 12 see the interviewer, or if they're walking 13 away. You can't really quantify that, so you 14 can't really -- you can't really see how many 15 people would have been approached. There's 16 just no way to do it. 17 Q. How about for telephone surveys? 18 Can one calculate the response rate for 19 telephone survey? 20 A. Yes. 21 Q. And how does one do that? 22 A. Well, we try to figure out what 23 percentage of people you completed the 24 interview with based on what percentage of 25 people are likely or qualified or likely to</p>
<p>1 McCullough 2 U.S. Census reports, and from that base of 3 people that we establish in each of these six 4 categories, we then draw our interviews from 5 them. So that because of the fact that you 6 can -- for instance, you get -- if you just 7 went in and did willy-nilly, you'd get more 8 women than men, but our quotas are -- our 9 screening quotas are set up in a such a way 10 that we get roughly -- in terms of answering 11 the screening question, we get the same 12 number of men and women, because that's what 13 the population statistics indicate. You may 14 also get people of different age groups if 15 you didn't do a special screening like we 16 did. So we screen people into these special 17 age groups, so we avoid the problem that 18 you're alluding to here in terms of certain 19 people being -- having more of a proclivity 20 to be available in the mall or interested in 21 doing the interview. 22 Q. You said if you went in 23 willy-nilly, you would get more women than 24 men. Why is that? 25 A. Because more women go to malls than</p>	<p>Page 119</p> <p>1 McCullough 2 qualify. 3 Q. So in the denominator you include 4 people who participate in the initial 5 telephone interview? 6 A. In the denominator -- well, in the 7 numerator you'd have the number of interviews 8 that you completed. The denominator, you 9 have number of people who met your screening 10 criteria, and potentially you would 11 extrapolate that to those you didn't reach, 12 and therefore would have -- would have -- 13 would have met your screening criteria if you 14 had reached them. 15 Q. If you're conducting a telephone 16 survey, what do you do if people just don't 17 answer the phone? 18 Do they go into the denominator? 19 A. They don't go into any part of the 20 calculation. 21 Q. Let's do another break. 22 A. Sure. 23 THE VIDEOGRAPHER: Going off the 24 record. Time is 11:30 a.m. This is the 25 end of tape two.</p>

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<p>Page 122</p> <p>1 McCullough 2 (Recess taken.) 3 THE VIDEOGRAPHER: We are back on 4 the record. The time is 11:49 a.m. 5 This is the beginning of tape three. 6 ([McCullough] Exhibit 14, Mr. 7 McCullough expert report in Levi Strauss 8 case, marked for identification, as of 9 this date.) 10 Q. I've handed you what's been marked 11 as Exhibit 14. Is this a report that you 12 submitted in a case involving Levi Strauss? 13 A. (Reading) Well, it appears to be, 14 although I have no recollection of this case. 15 Q. You have no recollection of 16 submitting a report in a case involving Levi 17 Strauss? 18 A. A couple of cases I've been 19 involved with where they've been on the -- 20 they've been on the other side. 21 Q. So let me -- 22 A. I don't remember this particular -- 23 Q. To -- 24 A. -- case. 25 Q. -- walk through this for a moment,</p>	<p>Page 124</p> <p>1 McCullough 2 A. No. 3 Q. Okay. Are you able to -- having 4 taken a look at this for a moment, have you 5 been able to determine that this is not a 6 report by you? 7 A. Well, I have to assume that since 8 the beginning talks about -- well, it has my 9 name and it says I've done research for 30 10 years or so. (Reading). 11 Q. Look -- 12 A. It looks like it's a description of 13 me, but I just don't remember the actual 14 project. 15 Q. Okay. But reading the first page, 16 your name and title and the qualifications 17 stated, those look like you, yes? 18 A. Yes, they do. 19 Q. Have you -- let's like at page two. 20 Have you from time to time in the course of 21 your work referred to the "Reference Guide on 22 Survey Research" chapter of the Reference 23 Manual on Scientific Evidence from the 24 Federal Judicial Center, by Sheri Diamond? 25 A. Yes, I have.</p>
<p>Page 123</p> <p>1 McCullough 2 let me ask you to turn to page two. 3 A. Okay. 4 Q. Under the heading "Information 5 Provided For Evaluation" it says you reviewed 6 a report of the Professor Scott December '04, 7 and reviewed a transcript of the deposition 8 of Professor Scott February -- 9 A. Um-hm. 10 Q. -- '05. Do you remember that? 11 A. No. (Laughing). 12 Q. Have you from time to time been 13 retained to critique surveys done by other 14 people? 15 A. Yes, I have. 16 Q. Do you recall ever being retained 17 to critique a report by Professor Scott? 18 A. You're refreshing my memory, but I 19 don't recall it. Honestly don't remember it. 20 Q. Are you familiar with Professor 21 Scott? 22 A. Not as we sit here, I'm not. 23 Q. Okay. I -- I happen to be familiar 24 with a Professor Carol Scott. If I mention 25 the first name Carol, does that ring a bell?</p>	<p>Page 125</p> <p>1 McCullough 2 Q. Are you familiar with that work? 3 A. Yes, I am. 4 Q. And do you regard that as an 5 appropriate reference tool? 6 A. It's an appropriate reference tool, 7 yes. 8 Q. Is that an authoritative statement 9 on standards for research surveys? 10 A. As a basic guideline, yes. Most of 11 what she says in there I would agree with. 12 Certain things I may not agree with. But as 13 a basic tool, particularly for people that 14 were not familiar with surveys, it's a good 15 starting point. 16 Q. Do you recall something in 17 particular in her work that you don't agree 18 with? 19 A. I recall that there was some things 20 -- well, I haven't read her recently, besides 21 this, several times over the years, but there 22 were a couple of things that I felt that she 23 was not really necessarily on target with. I 24 don't remember what they are now, though. 25 Q. All right. I think you</p>

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<p style="text-align: right;">Page 126</p> <p>1 McCullough 2 acknowledged that from time to time you have 3 been engaged to critique work by other survey 4 experts. In doing that, have you cited to 5 the Federal Judicial Center "Reference Guide 6 on Survey Research" chapter? 7 A. Yes. I've sometimes used her 8 outline as a guideline. 9 Q. And would you agree that it's 10 appropriate to apply those same guidelines to 11 your own work? 12 A. Yes. 13 Q. So let me run through some of these 14 questions. 15 The first question listed here on 16 Exhibit 14 is "Was the survey designed to 17 address relevant questions?" Do you regard 18 that as an appropriate question? 19 A. Yes. 20 Q. What was the question that your 21 survey was designed to address, and -- and -- 22 and do you have an understanding one way or 23 the other as to whether it was -- that 24 question was relevant? 25 A. Well, the question that the survey</p>	<p style="text-align: right;">Page 128</p> <p>1 McCullough 2 Exhibit 14. Question two -- let me give a 3 copy to the court reporter just in case -- 4 "Was participation in the design and 5 administration and interpretation of the 6 survey appropriately controlled to ensure the 7 objectivity of the survey?" Is that an 8 appropriate question to apply? 9 A. In general concept, yes. 10 Q. In what way was your survey 11 designed so as to ensure objectivity? 12 A. The -- the questions that -- the 13 method of showing respondents the stimulus 14 was an objective way of doing it, because 15 this is a piece that is available from the 16 websites, so the -- the stimulus information 17 was appropriate. The questions -- the 18 questions I asked were a fair question. They 19 were not leading questions. And the answers 20 for the most part that we relied upon were 21 answers that were volunteered by respondents. 22 So I think it's a good, straightforward, fair 23 questionnaire. 24 Q. When you ask about the perceived 25 value of the one feature, adaptive lighting,</p>
<p style="text-align: right;">Page 127</p> <p>1 McCullough 2 addressed, as I indicated before, is -- is 3 the value that consumers would put on the 4 adaptive lighting technology. 5 Q. And do you have an understanding or 6 opinion as to whether that question is 7 relevant in the context of this litigation? 8 A. I'm told by counsel it's relevant. 9 Q. Do you yourself have an opinion or 10 an understanding on the subject? 11 A. Inasmuch as I don't know about the 12 rest of the case, it's hard for me to answer 13 that. 14 Q. Do I take it, then, that -- is it a 15 correct statement, then, that based on the 16 information that you have currently, you 17 don't have an opinion as to whether it's 18 relevant? 19 A. I don't have a personal opinion on 20 whether it's relevant. I was refer -- I was 21 responding to the attorneys' request. I 22 don't know about the rest of the case, so I 23 don't know how relevant my piece is to the 24 rest of the case. 25 Q. Let's look at number two stated in</p>	<p style="text-align: right;">Page 129</p> <p>1 McCullough 2 and you don't ask about the perceived value 3 of other features, isn't that leading, 4 inherently? 5 A. No. 6 Q. Why not? 7 A. Leading is a term that's basically 8 used to -- to -- to define a situation where 9 your question suggests an answer, and the 10 question doesn't suggest an answer in this 11 case. The respondent is able to answer based 12 on their own beliefs. 13 Q. Let's look at number three. 14 Question three reads "Are the experts who 15 designed, conducted or analyzed the survey 16 appropriately skilled and experienced?" 17 That's appropriate to ask, yes? 18 A. Yes, it is. 19 Q. Number four, "Are the experts who 20 will testify about others appropriately 21 skilled and experienced?", that, too, is 22 appropriate to ask, yes? 23 A. I believe so. 24 Q. Number five, "Was an appropriate 25 universe or population identified?", that's</p>

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<p>1 McCullough 2 appropriate to ask, yes? 3 A. Yes, it is. 4 Q. How did you identify the universe 5 or population for your question? 6 A. Well, it was based upon, as you 7 probably know, people who had bought a color 8 printer in the past year or thought they 9 might buy one in the next year, so that's by 10 definition a relevant universe. 11 Q. Point six on Exhibit 14, "Did the 12 sampling frame approximate the population?", 13 is that an appropriate question? 14 A. Yes, it is. 15 Q. What does "sampling frame" mean? 16 A. Sampling frame is really the way in 17 which you obtain your respondents to meet the 18 population definition. 19 And the way I did that was, as we 20 described before, I described before, was to 21 talk to men and women who met the 22 qualification, involved after I had gone 23 through a screening of age and sex to make 24 sure that there is a good distribution of 25 people asking the screening questions that</p>	<p>Page 130</p> <p>1 McCullough 2 is widely used in the marketing research and 3 media research field, and one that the courts 4 have rarely excepted. 5 Q. Is it -- do you have an opinion 6 here that in your particular survey, 7 non-response -- level of non-response did not 8 bias the results? 9 A. I have no reason to suspect 10 non-response in any way biases the results. 11 Q. And do you have reason to believe 12 that non-response did not bias the results? 13 A. I'd actually say -- since I don't 14 know what the non-response rate was, I'd have 15 to say that based on the procedures we use, 16 that I don't think that non-response -- there 17 is no reason to think that non-response is an 18 issue here. 19 Q. Is there a phenomenon in mall 20 intercept surveys that the people who are 21 friendly by nature are more likely to be 22 willing to stop and participate than people 23 who are less friendly by nature? 24 A. I think that's true of all 25 interviewing, not just in malls.</p>
<p>Page 131</p> <p>1 McCullough 2 come from six different age/sex groupings. 3 Q. Question seven on Exhibit 14 reads 4 "How was the sample selected to approximate 5 the relevant characteristics of the 6 population?" That's an appropriate standard 7 to ask? 8 A. Yes. 9 Q. And do you have anything further to 10 add on what you just told me? 11 A. I think I pretty much answered that 12 along with six. 13 Q. Question eight on Exhibit 14 reads 14 "Was the level of non-response sufficient to 15 raise questions about the representativeness 16 of the sample? If so, what is the evidence 17 that non-response did not bias the results of 18 the survey?" Is that an appropriate question 19 to ask? 20 A. It is an appropriate question to 21 ask. 22 And, as we indicated before, when 23 you do mall surveys, you really don't have a 24 way of calculating non-response rate, but it 25 is a -- it is an interviewing technique that</p>	<p>Page 133</p> <p>1 McCullough 2 Q. And is there a phenomenon in malls 3 or everywhere that those people are more 4 likely to wish to please the interviewer than 5 people who decline to participate? 6 A. There is a phenomenon that has been 7 described in the literature in certain 8 situations that people try to please the 9 interviewer. 10 You try to avoid that situation by 11 not asking questions where you have obvious 12 answers, like leading questions. 13 Q. Number nine on Exhibit 14 reads 14 "What procedures were used to reduce the 15 likelihood of a biased sample?" That's an 16 appropriate question to ask, yes? 17 A. Yes. I think -- 18 Q. And what procedures of that nature 19 were used in your survey? 20 A. I was -- I think I described that 21 to a large degree when I talked about six and 22 seven. The screening process to make sure 23 that I started out with a representative 24 sample of men and women in those age groups 25 is a method that's used to reduce the</p>

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<p>Page 134</p> <p>1 McCullough 2 likelihood of biased sample. 3 Q. Question ten on Exhibit 14 reads 4 "What precautions were taken to ensure that 5 only qualified respondents were included in 6 the survey?" That's an appropriate question 7 to ask in a survey, yes? 8 A. Yes. 9 And basically we asked our 10 screening questions the way we've done it, 11 and then we also validate the question in a 12 vacuum. 13 Q. Point 11 on the next page of 14 Exhibit 14 reads "Were questions on the 15 survey framed to be clear, precise and 16 unbiased?" That is appropriate to ask of a 17 survey, yes? 18 A. Yes. 19 Q. And do you believe you met that 20 standard here? 21 A. Absolutely. 22 Q. Anything further to say on that 23 beyond what you've already told me? 24 A. I don't think so. 25 Q. Question 12 on Exhibit 14 asks</p>	<p>Page 136</p> <p>1 McCullough 2 asked them, well, how much less do you think 3 that would be. They're giving you an 4 estimate of what they think based upon the 5 information they've seen and based upon their 6 own needs and their own assessment of what 7 this -- what the feature's worth. That's not 8 -- that's not guessing. That's -- that's -- 9 that's responding to the questions. 10 Q. Where these are people who don't 11 have previous experience setting the price 12 for a product as a printer, why isn't it 13 guessing when you asked them how much less it 14 would cost without this feature? 15 A. Well, they're not setting a price, 16 actually. What they're doing is they're 17 giving an estimate of what the -- of what the 18 feature's worth to them by answering the 19 question of how much less would it cost if it 20 didn't have it. They're not setting the 21 price in any way. They're giving you their 22 estimate of how much less they think it would 23 cost, based on their own assessment of the 24 value as to them. 25 Q. Why didn't you ask them what would</p>
<p>Page 135</p> <p>1 McCullough 2 "Were filter questions provided to reduce 3 guessing?" Is that appropriate to ask of a 4 survey? 5 A. In the right circumstance, yes. 6 Q. Should that -- does that 7 circumstance apply to your survey in this 8 case? 9 A. There's no situation here where I 10 think a filter question as normally described 11 would be appropriate. 12 Q. In this case, when you asked people 13 how much less would the printer cost without 14 the adaptive lighting feature, weren't they 15 guessing? 16 A. No. They were estimating -- 17 Q. What's the difference? 18 A. -- what they thought -- 19 Well, guessing is really just 20 picking a number out of the air or picking -- 21 usually picking among choices that might be 22 provided. 23 We asked people if they thought it 24 should be the same price or a lower price, 25 and if they said it would cost less, then we</p>	<p>Page 137</p> <p>1 McCullough 2 it be worth to them? 3 A. Well, I did ask them that, but I 4 asked them in a better way. 5 Q. What are instances where you 6 believe as a survey expert that filter 7 questions should -- should be provided? Can 8 you give me an example? 9 A. Well, let's say you're going to ask 10 people what comes to mind is an advertising 11 situation, and you show people a print ad, 12 and let's say you're interested in a certain 13 topic in the print ad. You might ask people 14 when you looked at that print ad, do you 15 recall seeing anything about the topic, and 16 if they say yes, then you can ask them the 17 further questions about the topic. If they 18 say no, then you skip them out, rather than 19 going right into the questions without asking 20 that filter. That's what comes to mind. 21 There are a number of the cases. And most 22 filters are like yes/no type questions. And 23 there's probably many examples, but that's 24 the one that comes to mind. 25 Q. Question 13 on this exhibit reads</p>

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<p style="text-align: right;">Page 138</p> <p>1 McCullough 2 "Did the survey use open-ended or 3 closed-ended questions? How was the choice 4 in each instance justified?" That's an 5 appropriate question to ask an examining 6 survey, correct? 7 A. That's correct. 8 Q. Which was yours, open-ended or 9 closed-ended, and how was the choice made? 10 A. Well, in terms of the -- the price 11 questions, the first question was open-ended. 12 The follow-up question, people said that it 13 was less but they didn't know how much less, 14 was closed-ended. I think that combination 15 of questions here is a -- is a legitimate way 16 of going about it, because some people are 17 reluctant to give a specific number when you 18 ask them how much less, but they're able to 19 put it within certain boundaries. 20 Not too dissimilar when you ask 21 people what's their income, and many people, 22 in that case, they don't necessarily want to 23 answer the question, or maybe they don't even 24 know, but then when you asked them, well, is 25 it between 25,000 and 50,000, they can say</p>	<p style="text-align: right;">Page 140</p> <p>1 McCullough 2 part. 3 And, as it turns out, if I had done 4 the open-ended responses, I should have 5 actually used much higher levels. 6 Q. Why do you say that? 7 A. Well, because the median turned out 8 in one study to be like \$20, and the median 9 in the other study came out to be \$50, so 10 that these choices which I did a priori 11 turned out to be much too low. Usually you'd 12 want to -- you'd want to get the range where 13 you're kind of -- in the middle range is 14 around the median, so I probably should have 15 levels that were, you know, 20 to 25, 25 to 16 50, that kind of -- or 25-30, something like 17 that. 18 Q. Do you have any understanding what 19 it actually does cost HP to include that 20 adaptive lighting feature in the printer 21 where that's included? 22 A. I think that's almost irrelevant to 23 this, because what it cost them has nothing 24 to do with what the value is to the consumer. 25 We're not asking what it cost HP. We're</p>
<p style="text-align: right;">Page 139</p> <p>1 McCullough 2 yes to that question, but maybe, if they're 3 not the breadwinner, they don't even actually 4 know the income, but they know it's in the 5 range. So it's appropriate to follow up with 6 that kind of question, a closed-ended 7 question like that after you've made the 8 attempt to get the open-ended response. 9 Q. So let's look at the closed-end 10 portion of yours, which is in your report at 11 Exhibit A, and I think it's at page M2. 12 A. Okay. 13 Q. Question three, is this what you 14 referred to as the closed-end portion of your 15 question? 16 A. Yes, it is. 17 Q. So you offer as choices "less than 18 a dollar" is choice A, and B is a higher 19 number, and so forth, C, D and E. 20 Why didn't you offer "less than 21 five cents" as one of the choices? 22 A. I just picked numbers that I 23 thought were relatively conservative and 24 represented a decent range of numbers. It 25 was somewhat arbitrary, judgmental on my</p>	<p style="text-align: right;">Page 141</p> <p>1 McCullough 2 asking him what price they expect if you -- 3 if you -- if you pay for it. 4 Q. When you designed the survey did 5 you have the understanding that the cost to 6 HP to include the adaptive lighting feature 7 is likely a small number of pennies or 8 substantially less than a penny per printer? 9 A. I have no idea (indicating) -- 10 THE COURT REPORTER: "I have no 11 idea" -- 12 A. -- what it was costing. 13 (Discussion off the record.) 14 Q. Let's go back to Exhibit 14. 15 A. Sure. 16 Q. Question 14 reads "If probes were 17 used to clarify ambiguous or incomplete 18 answers, what steps were taken to ensure that 19 the probes were not leading and were 20 administered in a consistent fashion?" In 21 some studies, is that an appropriate question 22 to ask? 23 A. In some studies it is. 24 It's not appropriate -- it's not 25 really applicable here.</p>

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<p>1 McCullough</p> <p>2 Q. You didn't use probes in your</p> <p>3 survey.</p> <p>4 A. No.</p> <p>5 Q. Or at least interviewers were</p> <p>6 instructed not to probe by asking anything</p> <p>7 beyond what was written in the --</p> <p>8 A. That's correct.</p> <p>9 Q. -- questionnaire.</p> <p>10 A. That's correct.</p> <p>11 Q. Item 15 reads "What approach was</p> <p>12 used to avoid or measure potential order or</p> <p>13 context effects?" Is that appropriate as a</p> <p>14 question to ask about a survey?</p> <p>15 A. Yes, it is.</p> <p>16 Q. And let's look at that same</p> <p>17 closed-ended portion of the question that we</p> <p>18 were just looking at.</p> <p>19 MS. KINGSBURY: The M2, Exhibit A?</p> <p>20 MR. BUCHANAN: Yes.</p> <p>21 THE WITNESS: (Perusing document)</p> <p>22 Okay. There we go.</p> <p>23 (Witness and counsel confer off the</p> <p>24 record.)</p> <p>25 A. Okay.</p>	<p>Page 142</p> <p>1 McCullough</p> <p>2 question when you were designing this?</p> <p>3 A. I may have given tangential</p> <p>4 thought, but I would have automatically said</p> <p>5 this is not one to rotate.</p> <p>6 Q. So as best you -- you can remember,</p> <p>7 you didn't actively think about it, but you</p> <p>8 nearly automatically put it --</p> <p>9 A. Well --</p> <p>10 Q. -- in ascending order; is that</p> <p>11 correct?</p> <p>12 MS. KINGSBURY: Objection.</p> <p>13 Mischaracterizes his testimony.</p> <p>14 A. Yes, I may have thought about it,</p> <p>15 and the reason I say that is I did rotate, as</p> <p>16 you probably know, question one, where there</p> <p>17 I think it might have some difference. So I</p> <p>18 rotated the choice in question one from, you</p> <p>19 know, "would cost less" first half the time,</p> <p>20 and "would be the same cost" the other half</p> <p>21 the time.</p> <p>22 So rotation is always, when you</p> <p>23 (inaudible) a question -- I mean any good</p> <p>24 researcher, experienced researcher, is always</p> <p>25 thinking, when they write a question, should</p>
<p>Page 143</p> <p>1 McCullough</p> <p>2 Q. So for the people who were --</p> <p>3 By the way, this came in the form</p> <p>4 of -- people who said "cost less, but don't</p> <p>5 know how much" were handed a card --</p> <p>6 A. Yes.</p> <p>7 Q. -- is that right?</p> <p>8 And this item three here reproduces</p> <p>9 what was on the card?</p> <p>10 A. That's correct.</p> <p>11 Q. And the card was in this order, A,</p> <p>12 B, C, D, E?</p> <p>13 A. That's correct.</p> <p>14 Q. So the order begins with one dollar</p> <p>15 and goes up to \$20 or more?</p> <p>16 A. Yes.</p> <p>17 Q. Why not have half the cards rotated</p> <p>18 the other way, and begin with \$20 or more and</p> <p>19 go down to less than one?</p> <p>20 A. I think that would be very unusual</p> <p>21 and maybe even confusing to people. I think</p> <p>22 most people are used to thinking of things in</p> <p>23 terms of ascending order, and therefore we</p> <p>24 didn't want to confuse the respondents.</p> <p>25 Q. Did you give some thought to that</p>	<p>Page 145</p> <p>1 McCullough</p> <p>2 it be rotated. I probably actually</p> <p>3 considered it, but it's like one of those</p> <p>4 split-second decisions you make based on</p> <p>5 looking at the question: This question, both</p> <p>6 in retrospect and what -- I see no reason why</p> <p>7 to rotate it at this point, I still do not</p> <p>8 rotate it after you pointed that out.</p> <p>9 Q. So let's look at question one that</p> <p>10 you pointed me to.</p> <p>11 A. Okay.</p> <p>12 Q. The first choice was -- as printed</p> <p>13 here, choice one was "would cost less."</p> <p>14 Choice two was "price would be the same."</p> <p>15 A. Right.</p> <p>16 Q. And you rotated the order of those</p> <p>17 two.</p> <p>18 A. Yes.</p> <p>19 Q. Choice three was "don't know." Why</p> <p>20 isn't that included in the rotating also?</p> <p>21 A. Well, you don't ask the person a</p> <p>22 "don't know" question. The "don't know" is</p> <p>23 something that's volunteered.</p> <p>24 Q. So you didn't -- so they weren't</p> <p>25 given that "don't know" as an option here.</p>

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<p>Page 146</p> <p>1 McCullough 2 A. Well, not here they weren't, but in 3 the paragraph, the preamble up above asks -- 4 the sentence says "If you don't know the 5 answer to any of my questions, please don't 6 hesitate to say that." So we give them a 7 global instruction, so any point during the 8 interview they want to say they don't know, 9 they feel free to say that. 10 But here, these two options that 11 they were given were the ones that in the -- 12 that are written into the question, which is 13 "would cost less" or "price would be the 14 same," half the time in that order, half the 15 time in the reverse order. 16 Q. And why did -- did you think of 17 also giving them as an option "would cost 18 more"? 19 A. Well, I thought of it for a second, 20 and dismissed it as being silly, because it 21 really just doesn't make any sense. 22 Q. By the way, reading the portion of 23 question one here that appears right before 24 those choices, might it be the case that some 25 respondents may wonder whether the feature</p>	<p>Page 148</p> <p>1 McCullough 2 balancing relationships between bright and 3 dark areas in a photo, preserving gentle 4 contrasts by smoothing out harsh contrasts." 5 Where did you get that language from? 6 A. I believe it was kind of a 7 compilation of things I got from the 8 different sites that I visited, and I put 9 together what I thought was a good 10 description based upon various descriptions, 11 mostly from HP website. It's not one -- it's 12 not one place I got it all from. It was kind 13 of a composite of what I got from the various 14 sites. 15 Q. And the various sites that you went 16 to, the various things that are now in your 17 folder are the things we went through earlier 18 in the deposition? 19 A. Well, that's probably some of it, 20 but there's a lot of other stuff that I 21 didn't print out that I went to. I did a lot 22 of searching around the HP website. There 23 was a lot of stuff there. 24 Q. Do you believe that you drew on 25 wording from somewhere else on the HP website</p>
<p>Page 147</p> <p>1 McCullough 2 that does not have this -- excuse me, the 3 printer that does not have adaptive lighting 4 may have something else in addition beyond 5 the printer that you showed them? 6 A. No, I can't guess what's in 7 somebody else's mind, but I don't see any 8 reason why they would think that. I don't 9 know why they would think something like 10 that. 11 Q. Did you give any thought to that as 12 you were designing question one? 13 A. No. 14 I don't think it's a reasonable 15 thing for people to think about. 16 Q. Back up to the main part of 17 question one, the part that begins "This 18 particular color Inkjet printer contains a 19 feature called adaptive lighting technology" 20 -- let me just read the rest of it so that 21 we'll have a clear record. "Adaptive 22 lighting technology is a break-through 23 technology that enables printers to produce 24 photos that look more like what people see 25 with their own eyes. It accomplishes this by</p>	<p>Page 149</p> <p>1 McCullough 2 that you did not print out and keep? 3 A. There probably were components of 4 it that I didn't print out and keep, because 5 I was visiting a lot of websites, a lot of 6 parts of the website at different points in 7 time, and it's very likely there that are 8 parts I didn't keep. 9 Q. Let me ask you a more specific 10 question. I'm sure that -- I understand that 11 in the course of your work, generally you 12 looked at many Web pages. 13 A. Right. 14 Q. As you were preparing the wording 15 for question one in particular, to the extent 16 that you drew on wording on the HP website, 17 did you print that out so that you would have 18 a record of it, or do you believe that 19 question one wording itself rests on portions 20 that you didn't keep? 21 A. The latter. 22 Q. What makes you think so? 23 A. Because I don't -- I don't recall 24 taking just one definition from someplace and 25 not modifying it. A number of the</p>

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<p>1 McCullough 2 definitions were somewhat slightly different 3 one from the other, and I tried to make 4 something that was cohesive, so I think, as I 5 recall back months ago, putting together this 6 definition based on seeing a lot of different 7 definitions that HP had for adaptive 8 lighting. It didn't just come from one 9 specific source.</p> <p>10 Q. And so this morning, earlier we 11 looked at I think eight different places from 12 the HP website. You think that you based 13 question one wording, in addition, on other 14 portions of the HP website that you did not 15 print out and keep?</p> <p>16 A. My recollections are that I -- I 17 didn't use any one wording, and therefore 18 what I printed out was not necessarily what I 19 depended on. I don't recall exactly how I 20 got that. I know I looked at a lot of 21 different definitions, and I didn't print out 22 everything, and I put this together based 23 upon what I thought was a constructive, 24 cohesive understanding of this that consumers 25 would understand.</p>	<p>Page 150</p> <p>1 McCullough 2 and trained?" Is that appropriate to ask of 3 a survey? 4 A. Yes. 5 Q. Do you believe that was met in 6 yours? 7 A. Yes. 8 Q. Have you worked with those same 9 subcontractor firms in the past? 10 A. Yes, we have. 11 Q. And have you had occasion to review 12 the work that they do in selecting and 13 training the interviewers? 14 A. I personally don't. My field 15 director controls that. But we use malls 16 that we've had previous experience with and 17 do good work for us, and that's how we 18 selected these. 19 Q. By the way, are the interviewers 20 themselves employees of the subcontractors, 21 or are they people who were recruited ad hoc 22 to do a particular job? 23 A. The former. 24 Q. Question 19 on Exhibit 14 reads 25 "What did the interviewers know about the</p>
<p>Page 151</p> <p>1 McCullough 2 Q. Okay, let's go back to Exhibit 14. 3 Question 16 reads "If the survey was designed 4 to test a causal proposition, did that survey 5 include an appropriate control group or 6 question?" For some surveys is that an 7 appropriate question to ask? 8 A. Yes. 9 Q. Does it apply to your survey? 10 A. No. 11 Q. Because your survey was not testing 12 a causal proposition. 13 A. Right. 14 Q. All right. Question 17 asks "What 15 limitations are associated with the mode of 16 data collection used in the survey?" Is that 17 an appropriate question to ask at the survey? 18 A. For some surveys it would be, yes. 19 Q. Are there any limitations 20 associated with the mode of data collection 21 that you used? 22 A. Not related to this survey, that I 23 can think of. 24 Q. Question 18 on Exhibit 14 asks 25 "Were the interviewers appropriately selected</p>	<p>Page 153</p> <p>1 McCullough 2 survey and its sponsorship?" Is that 3 appropriate to ask of the survey? 4 A. Yes. 5 Q. And what is the answer for yours? 6 A. They didn't know anything about any 7 sponsorship or any details of the survey or 8 what the results should be or might be. They 9 just had the questionnaire in front of them. 10 Q. Who -- does your field director 11 tell the subcontractors about the survey and 12 its sponsorship? 13 Do the management of these 14 companies know it? 15 A. Absolutely not, no. 16 He doesn't even know it. 17 Q. Oh. 18 A. My field director doesn't even know 19 it. 20 Q. So tell me about that. How does 21 that work? 22 A. I tell -- I tell the field director 23 what interviews I want to do and who I want 24 to interview, I prepare the questionnaire, 25 you know, with my project directors assisting</p>

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<p>1 McCullough 2 me, and he gets it administered. He calls 3 the field services and says: "I have a so 4 and so interview. It's ten minutes, the 5 incidence is 10 percent, and it will going to 6 be ready on -- we'll send it to you on 7 Thursday." So he doesn't really know the 8 details of what's going on.</p> <p>9 Q. So the project directors work with 10 you on designing this survey, but the field 11 director administers it not working with you 12 on what it's about.</p> <p>13 A. Yeah. He's an implementer. He's 14 not a party to the design.</p> <p>15 Q. Question 40 on Exhibit 14 reads 16 "What procedures were used to ensure and 17 determine that the survey was administered to 18 minimize error and bias?" Is that an 19 appropriate question to ask of a survey?</p> <p>20 A. Yes.</p> <p>21 Q. Do you believe you've met that 22 standard here?</p> <p>23 A. Yes.</p> <p>24 Q. Anything further to add beyond what 25 we've discussed already?</p>	<p>Page 154</p> <p>1 McCullough 2 our firm. My field director then checks it 3 in to know how many interviews were done and 4 make sure people were qualified. And then 5 one of our coding staff or clerical staff 6 will type the answers into the program. And 7 then somebody else, different person, checks 8 that to be sure it's entered correctly. And 9 then -- and then I have access to it.</p> <p>10 Q. Question 22 on Exhibit 14 reads 11 "What was done to ensure that the grouped 12 data were classified" consistency -- 13 "consistently and accurately?" Is that 14 appropriate question to ask of a survey?</p> <p>15 A. In some surveys, but we really 16 don't have any group data here.</p> <p>17 Q. What does "group data" mean in this 18 context?</p> <p>19 A. I think what they're talking about 20 is your subgroups. You're talking about 21 analytical subgroups. I think that's what 22 she's talking about there.</p> <p>23 Q. So, for example, if you had split 24 out people in one of your six age and sex 25 classifications --</p>
<p>Page 155</p> <p>1 McCullough 2 A. No, I don't think so.</p> <p>3 Q. Question 21 on Exhibit 14 reads 4 "What was done to ensure that the data were 5 recorded accurately?" Is that appropriate to 6 ask?</p> <p>7 A. Yes.</p> <p>8 Q. And what was done here?</p> <p>9 A. The data was entered and it was 10 checked. Somebody proofread all the answers.</p> <p>11 Q. So the procedure was the 12 interviewer subcontractor firms mailed the 13 questionnaires back to your firm?</p> <p>14 A. Yes. The interviewers saw (ph.) 15 the questionnaire. The supervisor then sent 16 (inaudible)--</p> <p>17 THE COURT REPORTER: I can't hear 18 you. I'm sorry.</p> <p>19 A. (Continuing) The interviewers fill 20 out the questionnaire.</p> <p>21 THE COURT REPORTER: "Saw?"</p> <p>22 THE WITNESS: Fill out the 23 questionnaires.</p> <p>24 A. (Continuing) They -- the 25 supervisors then send the interviews back to</p>	<p>Page 157</p> <p>1 McCullough 2 A. Yeah, if you want to go with men 3 versus women or young versus old, et cetera, 4 I believe that's what she's referring to.</p> <p>5 MS. KINGSBURY: I just want to 6 remind my witness and counsel to be 7 careful about talking over each other.</p> <p>8 THE WITNESS: Okay.</p> <p>9 I wouldn't do that!</p> <p>10 (Laughter.)</p> <p>11 THE WITNESS: Not purposely at 12 least.</p> <p>13 MS. KINGSBURY: No.</p> <p>14 Q. Question 23 on Exhibit 14 reads 15 "When was the information about the survey 16 methodology and results disclosed?" Is that 17 an appropriate as a question to ask of a 18 survey?</p> <p>19 A. Yeah, I guess so, even though it's 20 pretty obvious. When you issue a report, 21 that one is disclosed -- disclosed.</p> <p>22 Q. Does this question mean anything 23 further to you beyond that?</p> <p>24 A. That's all it means to me.</p> <p>25 Q. Question 24 on Exhibit 14 reads</p>

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<p style="text-align: right;">Page 158</p> <p>1 McCullough 2 "Does the survey report include complete and 3 detailed information on all relevant 4 characteristics?" Is that appropriate to 5 ask? 6 A. Yes. 7 Q. And in your report did you conclude 8 -- excuse me. Did your report include 9 complete information on all relevant 10 characteristics? 11 A. Yes, it does. 12 Q. And the final question, 25, on 13 Exhibit 14 reads "In surveys of individuals, 14 what measures were taken to protect the 15 identities of individual respondents?" Is 16 that appropriate to ask of a survey? 17 A. Yes, it is. 18 Q. What's the reason for that? 19 A. It's to help ensure that 20 respondents are willing to answer questions 21 and answer them without any concern about how 22 their answers might be used. There's no 23 sales follow-up. Make sure they're candid. 24 And therefore they -- there's an implicit 25 guarantee of confidentiality.</p>	<p style="text-align: right;">Page 160</p> <p>1 McCullough 2 A. To double-check the fact the 3 interview was actually conducted and, in our 4 case, to try to also be sure that the 5 qualifications were met in the survey. 6 Q. In your particular survey, what 7 organization did the validating phone calls? 8 A. It's an independent organization 9 called Park Research located in New Jersey. 10 Q. P-a-r-k? 11 A. P-a-r-k. 12 Q. Is its name stated somewhere in 13 this report? 14 A. I don't think so, no. 15 Q. The -- if you look at Exhibit D to 16 your report -- 17 A. Yes. 18 Q. -- the validation questionnaire has 19 the name of your organization but not the 20 name of the Park organization. Why is that? 21 A. Well, we're the ones who generated 22 the questions, so that we generate the 23 questions, and then we don't necessarily have 24 to send it to any one organization. 25 We happen to use Park Research a</p>
<p style="text-align: right;">Page 159</p> <p>1 McCullough 2 As a matter of fact, there's even 3 an explicit guarantee of confidentiality to 4 keep their respondent pool available to us in 5 the long term. Technically a natural 6 resource, so to speak. 7 Q. And was that done here? 8 A. Yes. 9 Q. In the course of a survey like 10 this, do you alert the people that they may 11 get a phone call afterwards to validate? 12 A. Sometimes we do and sometimes we 13 don't, and I'm not sure if we did it here or 14 not. I don't think we did it here. 15 I don't consider that to be, you 16 know, important. It's just arbitrary. Sort 17 of some do, some don't. 18 Q. But you did a validation exercise 19 here. 20 A. Yes, we did. 21 Q. You called back to ask people 22 whether they had participated in a survey. 23 A. And other questions beyond that, 24 yes. 25 Q. What's the purpose of validating?</p>	<p style="text-align: right;">Page 161</p> <p>1 McCullough 2 lot because they do work for us, but this way 3 we can send it to anybody we want. 4 Q. And where in your report is the 5 results of the validation exercise stated? 6 A. It's stated in the report. 7 (Perusing document) Let's see. The main 8 body, on page six of the report, the middle 9 of the paragraph at top: "Several attempts 10 were made to contact each respondent. 11 Attempts were curtailed when more than half," 12 in paren, "60 percent," close paren, "were 13 each invalidated," and then it goes on to say 14 a little bit more. 15 Q. And is there a table somewhere, or 16 do you have a report given to you which 17 states the results of the validation in more 18 detail than that? 19 A. I think you would have had that 20 produced to you. It's multiple pages that 21 basically say yes or no to each of the 22 questions for each respondent, and you should 23 have a copy of that. I think I produced 24 that. 25 Q. Now that we've spent some time on</p>

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<p>Page 162</p> <p>1 McCullough 2 Exhibit 14, the document which says it's a 3 report by you, do you now recognize it as a 4 report by you? 5 A. From what we've just read, all 6 we've actually do (sic) is read basically 7 Sheri Diamond's questions outlined, so I 8 really -- that didn't refresh my memory any 9 more, because her questions have nothing to 10 do with this specific thing. 11 I don't -- I don't dispute the fact 12 that I did this. It seems pretty obvious I 13 did. I just don't recall it. 14 Q. I would be content to break for 15 lunch now if you like. 16 A. Sure. 17 MS. KINGSBURY: Is that all right? 18 THE WITNESS: Sounds good. 19 MR. BUCHANAN: Off the record. 20 THE VIDEOGRAPHER: Going off the 21 record. The time is 12:30 p.m. This 22 is the end of tape three. 23 (Luncheon recess taken.) 24 25</p>	<p>Page 164</p> <p>1 McCullough 2 report -- 3 MR. BUCHANAN: Well, strike that. 4 Q. Is there anything in his report 5 that you do agree with? 6 A. (Laughing) Well, he -- he makes 7 reference to certain -- to the Sheri Diamond 8 chapter, et cetera. I'm not going to 9 disagree with his references to that. 10 If you're talking about 11 specifically his criticisms about me? I 12 don't think there's anything that I would 13 agree with, no. 14 Q. Having had a chance to read his 15 report and think about it, if you were going 16 back to do your survey over again, would you 17 do anything differently? 18 A. Nothing that I can think of right 19 now, no. 20 Q. One of his -- his first critique 21 was on page four, paragraph eight, that you 22 asked about costs rather than asking about 23 what we would -- people would pay for a 24 printer. And I asked you about that earlier. 25 Do you have anything to add on that subject</p>
<p>Page 163</p> <p>1 McCullough 2 A F T E R N O O N S E S S I O N 3 THE VIDEOGRAPHER: We are back on 4 the record. The time is 1:25 p.m. This 5 is the beginning of tape four. 6 W A L T E R J . M C C U L L O U G H , 7 resumed and testified further as follows: 8 CONTINUED EXAMINATION 9 BY MR. BUCHANAN: 10 Q. Welcome back, Mr. McCullough. 11 A. Thank you. 12 Q. Have you had a chance to see the 13 rebuttal report of Dr. Jacoby in this case? 14 A. Yes, I have. 15 MR. BUCHANAN: So let me ask to 16 mark that. 17 ([McCullough] Exhibit 16, rebuttal 18 expert report of Jacob Jacoby, Ph.D., 19 marked for identification, as of this 20 date.) 21 Q. Exhibit 16 is a copy of 22 Dr. Jacoby's rebuttal report, and that's the 23 one you've seen? 24 A. Yes, that's correct. 25 Q. In light of the comments in his</p>	<p>Page 165</p> <p>1 McCullough 2 other than what you already told me this 3 morning? 4 A. His criticism of me was actually 5 quite curious, because I don't see how he 6 took that away from the question. He seems 7 to be implying here that I was asking about 8 manufacturer cost, but if you read the 9 question, I think anybody who reads the full 10 question would realize what we're talking 11 about is the cost to the consumer. And in 12 the same sentence, the word price is used. 13 There's no reference whatsoever or I can't 14 even imagine how anybody would even think 15 that I'm trying to ask these consumers what 16 the manufacturer cost would be, but he seems 17 to allude to that in his criticism. 18 MR. BUCHANAN: Let's pause for a 19 moment, because a new chair is coming 20 in. 21 THE VIDEOGRAPHER: Going off the 22 record. The time is 1:27 p.m. 23 (Discussion off the record.) 24 THE VIDEOGRAPHER: We are back on 25 the record. The time is 1:28 p.m.</p>

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<p>1 McCullough 2 Q. And having read the comments that 3 Dr. Jacoby wrote about this, if you were now 4 going to go back and ask your question again, 5 would you ask it exactly the same or would 6 you change anything? 7 A. I'd ask it the same way. I think 8 it's a very clear question. 9 Q. The next major point Dr. Jacoby 10 makes, on page five, is -- I'll paraphrase -- 11 that the printers have numerous features, and 12 by asking about one of them, you drew 13 attention to that one at the expense of the 14 others. ; isn't that correct? 15 A. I drew attention to one is correct. 16 I'm not sure I would agree with the idea of 17 your last part of your question. There was 18 one that we were typically concerned about. 19 I wasn't really concerned about the other 20 features or if some of those were to be 21 removed, how much less the product would cost 22 if those were removed, so I didn't ask about 23 those, because they weren't an issue of 24 concern. 25 Q. The -- this particular page of Dr.</p>	<p>Page 166</p> <p>1 McCullough 2 yours, but instead of asking about the 3 adaptive lighting feature you asked about the 4 feature that says "Aproa color faxing," and 5 you ask people how much less would the device 6 cost if it lacked that feature. Would you 7 expect to get numbers similar to the ones you 8 got when you asked about adaptive lighting? 9 A. By asking about that specific 10 feature? 11 Q. Right. 12 A. I have no idea. I didn't do that. 13 Q. And if you asked about built-in 14 wireless networking, would you expect to get 15 numbers similar to yours, or different? 16 A. The same answer. I didn't do it, 17 so I don't know. 18 Q. If you asked about any ten 19 features, isn't it likely that you would get 20 numbers that in total would exceed the price 21 of the printer? 22 A. I have no idea if that would be the 23 case or not. 24 Q. The -- 25 THE VIDEOGRAPHER: I'm getting</p>
<p>Page 167</p> <p>1 McCullough 2 Jacoby's report, in paragraph ten, points out 3 features. It lists a number of them. I see 4 -- one, two, three, four, five, six, seven, 5 eight -- nine features there. If you ran a 6 survey similar to yours with essentially the 7 same question but asking about these other 8 features instead, do you expect that you 9 would get back numbers similar to the numbers 10 you got? 11 A. I don't know, because that's 12 speculative. 13 But I don't think that kind of a 14 survey would be very reasonable. If you're 15 asking people here's a machine, and if it 16 didn't have this, how much less would it 17 cost, and then if it didn't have this, how 18 much less would it cost, and if it didn't 19 have this, it seems it's a very awkward 20 survey vehicle. 21 Q. And my -- my question wasn't clear. 22 A. Okay. 23 Q. I can tell by your answer, that it 24 didn't come out the way I intended it. 25 Suppose you ran a survey just like</p>	<p>Page 169</p> <p>1 McCullough 2 interference from somebody's BlackBerry. 3 (Discussion off the record.) 4 Q. Dr. Jacoby, on page nine says that 5 your survey, as constructed, called for 6 people to make guesses, and you told me this 7 morning that you thought these were 8 estimates, not guesses. Do you have anything 9 further to say on that subject? 10 A. I'd just reiterate, when you ask 11 people a question as I asked them, there is 12 no reason to suspect they're guessing. 13 You've given them information, and there is 14 no reason why they can't reply intelligently 15 as to -- as to what their answer would be. 16 It's an estimate on their part, but it's not 17 a guess. 18 Q. Were there any of the verbatim 19 responses that sounded like guesses when you 20 read them? 21 A. I think there were one or two 22 people who used the word "I guess it would 23 be" so and so, as a matter of speaking 24 parlance, but that doesn't -- that doesn't 25 mean they were guesses. It's just the way</p>

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<p>Page 170</p> <p>1 McCullough 2 that people speak sometimes. 3 Q. So let's look at, for example -- 4 I'm going to ask you to direct your attention 5 to your report, section E, second page of 6 data after tab -- after E. 7 A. Okay. 8 Q. Let me direct your attention to 9 questionnaire number 410, near the bottom. 10 Question one, "cost less," question two, 11 "taking a stab at the dark, but \$15 comes to 12 mind," does that sound like a guess? 13 THE COURT REPORTER: I didn't 14 understand you. 15 (Discussion off the record.) 16 A. I think it's one person expressing 17 their opinion, and they're saying the way 18 that makes it sound more like a guess, but, 19 you know, they're not just -- they're not 20 just coming up with a number arbitrarily, 21 they're coming up with some kind of estimate, 22 even though the way they did it makes it 23 sound like some kind of guess. 24 Q. And let me ask you to turn a couple 25 more pages to there's an answer for</p>	<p>Page 172</p> <p>1 McCullough 2 A. Sure. 3 Q. -- "between 50 or a hundred bucks." 4 A. No, what was the percentage? 5 Because that's a good way. That's the way to 6 identify people. 7 You said a number on the right-hand 8 column? 9 Q. Yes, 75.9358. 10 A. Okay. Now I got it. 11 Q. So is that person guessing? 12 A. No. They're estimating between 50 13 and a hundred dollars. 14 Q. And why did you put down for the -- 15 am I correct in understanding from the next 16 to last column that the number you included 17 in your calculation of mean or median for 18 that person was 75? 19 A. Correct. 20 Q. Why 75? 21 A. Because that's the midpoint between 22 50 and a hundred. 23 Q. And when this person said between a 24 hundred -- "between 50 or 100," would 51 25 equally fall between 50 and a hundred?</p>
<p>Page 171</p> <p>1 McCullough 2 questionnaire number 490, question one, 3 "costs less," question two, "between 15 or 4 100 bucks." Do you see that one? 5 A. What happened to the page? Because 6 they're not in any order. 7 Can you tell me which page that is? 8 Q. If you look in the column on the 9 next to the far right. 10 A. How many pages in from the 11 beginning? 12 That might be easier -- 13 Q. Sure. 14 A. -- because the pages aren't 15 numbered. 16 Q. One, two, three, four, five -- 17 sixth. 18 A. And you said respondent 490? 19 Q. 490. The number in the next to the 20 right-hand column is 75. 21 A. Oh. 22 Q. In fact, there is a cumulative 23 percentage you can look at, 75.93583. 24 A. Ah. 75, is that (inaudible) -- 25 Q. So the verbatim response was --</p>	<p>Page 173</p> <p>1 McCullough 2 A. Well, the answer to that question 3 is, obviously, yes, because if you wanted 4 more than 50 but the answer -- I interpret 5 the answer is meaning they're giving me a 6 range, and I have to come up with one number 7 in the range, so I think it's the midpoint. 8 Q. And let me ask you one more 9 question on these verbatims. It's a 10 methodology question. If you turn to the end 11 of this section on C6180, the last page of 12 C6180. 13 A. (Perusing document) Okay. 14 Q. Am I correct in understanding that 15 these are respondents at the top there, "DK," 16 answered don't know? 17 A. I'm not -- you said the last page? 18 Q. The last page of C6180. 19 A. Oh, I'm on the wrong page. Okay. 20 (Perusing documents) 21 Q. So at the top there's a 22 questionnaire I.D. number 307. 23 A. Oh, yeah. These are people that 24 said they don't know. 25 Q. And am I right that you did not</p>

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<p>1 McCullough 2 include these in the calculation of the mean 3 or median? 4 "NA" in that column means not 5 applicable? 6 A. Right. 7 Q. And similarly, at the bottom 8 there's one questionable response as 9 identified in your report, 192, costs less, 10 two fifty. "NA" means that you did not 11 include that in the calculation; is that 12 right? 13 A. That's also correct. 14 Q. Okay. 15 Q. Mr. McCullough, have you also had a 16 chance to look at the report prepared by 17 Professor Jacoby on the survey that he 18 conducted? 19 A. Yes, I have. 20 MR. BUCHANAN: So let me ask that 21 we mark this. 22 ([McCullough] Exhibit 17, survey 23 report of Jacob Jacoby, Ph.D., marked 24 for identification, as of this date.) 25 Q. Is this a copy of the report that</p>	<p>Page 174</p> <p>1 McCullough 2 A. No. I had asked, when I had seen 3 it, if I -- if they wanted me to prepare a 4 rebuttal report, and they told me that the 5 deadline has passed for that. 6 Q. Have you -- 7 THE COURT REPORTER: "They" what? 8 THE WITNESS: That the deadline has 9 passed for that. 10 Q. Would you tell me, please, what 11 opinions have you formed thus far about the 12 Jacoby survey? 13 A. Well, there are lots of opinions. 14 Let me try to kind of organize it somewhat. 15 First of all, I -- I -- I 16 questioned his objectives in the fact that, 17 as I understand it, he was trying to, you 18 know, determine the information acquisition 19 and importance of various features, 20 particularly the adaptive lighting technology 21 feature, and the reason I question the 22 objective is it doesn't really go to the 23 value that that feature has to consumers, so 24 I think it's really very restrictive and 25 maybe not particularly helpful in terms of --</p>
<p>Page 175</p> <p>1 McCullough 2 you've seen? 3 MS. KINGSBURY: Sorry, Bob. Do you 4 have a copy for me, too? 5 MR. BUCHANAN: Oh, I'm sorry. 6 MS. KINGSBURY: That's okay. 7 MR. BUCHANAN: (Handing.) 8 MS. KINGSBURY: Thank you. 9 A. This appears to be the report, yes. 10 Q. And have you been asked to form any 11 opinions about Dr. Jacoby's survey? 12 A. Yes. 13 Q. And what have you been asked? 14 A. I've been asked to -- to be 15 prepared to critique his survey at trial. 16 Q. Ah. 17 And have you done your work to 18 prepare for that? 19 A. I've -- I've reviewed his report. 20 I've expressed my concerns or issues or 21 critique to counsel, but that's the extent to 22 which I have done that. 23 Q. And to be clear, you've not 24 provided a report in writing stating your 25 opinions about the Jacoby survey.</p>	<p>Page 177</p> <p>1 McCullough 2 of this -- this situation or this case. 3 If I also take a look at the design 4 of the survey, the basic scope of the survey, 5 I don't think it's very a objective approach 6 to even the issue he was trying to report on. 7 It -- it seems like the -- the 8 design of the test was such that almost on a 9 priority basis one could reach the opinion 10 that it's unlikely that adaptive lighting 11 could possibly come up with a high level of 12 -- of acquisition, as he calls it, or 13 importance because of the design itself. 14 More specifically, he makes the 15 assumption that if somebody doesn't access 16 one of the features, that by definition, to 17 him, that that's not an important feature, 18 and I think that's really very improper, 19 incorrect. And I think that his -- his data 20 actually I think indicates that as well. For 21 example, around I think only 75 percent of 22 the people, or something like that, accessed 23 the manufacturer. Using his logic, that 24 would mean that about 25 percent of the 25 people think that the manufacturer of the</p>

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<p>1 McCullough 2 printer that they are being simulated to 3 purchase is not important. It's hard to 4 believe that 25 percent of the people would 5 not think the manufacturer is important. 6 There were similar levels, 7 something like on price. The price of the 8 equipment, I think only like 72 percent of 9 the people accessed that button in the 10 computer program, which is saying that about 11 28 percent of the people then, by his 12 definition, would say the price of the 13 printer is not an important item. 14 Red eye removal is one which is 15 really extreme, in that I think it's only 16 twenty -- you know, 24, 26 percent of the 17 people that say it's important. That means 18 that like 72, 74 percent of the people, by 19 his definition, would say that red eye is not 20 an important feature. And there are a number 21 of others that I could have cited. Those are 22 the ones I happen to recall. So this whole 23 concept, this whole theory of him saying that 24 if the total design -- in saying that if a 25 person doesn't access that button or access</p>	<p>Page 178</p> <p>1 McCullough 2 None of these resources were anything that he 3 took into consideration. 4 He's making the assumption that he 5 can get a simulation done on the computer 6 based on this computer simulation he set up 7 which doesn't make real sense. Some evidence 8 to that is -- again, from his own report, is 9 I believe it was 74 percent of the people in 10 his sample who bought a computer in the past 11 year bought it in a retail store, which 12 suggests that obviously there was some 13 involvement in the retail store, maybe a lot 14 of involvement. 15 In one of the footnotes on one of 16 his pages of his report he indicates that he 17 kicked a hundred ninety six people out of the 18 survey who were potential respondents, 19 because they didn't have Internet access. A 20 hundred ninety six people is actually more 21 people he kicked out that are actually in his 22 whole survey. In another part of the 23 information, again from his own survey, among 24 people who had bought a printer in the past 25 year, I think around -- maybe around half of</p>
<p>1 McCullough 2 that information, that therefore it's not 3 important is just -- is just -- it's silly. 4 It's just wrong. 5 The other thing in the design is he 6 relies on this Internet simulation situation, 7 and his rationale for doing that is he asked 8 some questions about people, whether they 9 have looked on the Internet for information 10 about products, but the products could be 11 anything: They could be looking to buy 12 batteries. They could be looking to buy CDs, 13 et cetera. There's no -- there's no 14 qualification that the people would be 15 looking to buy printers on line. And -- and 16 the following of using that process, I think 17 there's some common sense following to it in 18 the fact that it's highly unlikely that 19 people buying a relatively expensive piece of 20 equipment compared to most consumer type 21 products would not look at more than one 22 source of information. For instance, there's 23 consumer reports. There is the stores you go 24 into. There are friends and colleagues. 25 There are technical people in your company.</p>	<p>Page 179</p> <p>1 McCullough 2 them or a little bit less than half of them 3 said that they did not use the Internet to 4 gather information about the printer before 5 they bought it. 6 So when you put these all together, 7 you realize that the stimulation (sic) on 8 the Internet is very unrealistic, and his own 9 data shows it's unrealistic. So that's some 10 of the basic design issues that we get into. 11 When we get into the actual 12 interview itself, let's talk about the 13 universe, kind of -- I'm kind of using as a 14 framework sort of like Sheri Diamond might 15 use, in terms of how to evaluate these 16 surveys. We talked about the universe. I 17 think the universe is appropriate, and 18 obviously I'm saying that because he used the 19 same universe as I did. 20 In terms of how he went about 21 getting it, the process of getting to the 22 sample, et cetera, was among the worst I've 23 seen maybe ever. The telephone method of 24 recruiting people conceptually is fine, but I 25 think it was 210,710 numbers that he dialed</p>

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<p style="text-align: right;">Page 182</p> <p>1 McCullough 2 or that were dialed in his behalf to try to 3 reach a hundred and ninety people that he 4 eventually put in his survey. There's 5 something wrong with that. There's something 6 wrong with the sample that he used. There's 7 something wrong with the techniques that he 8 used. There's no way that anybody should -- 9 who does a proper survey should have to use 10 that many phone numbers to try to get a 11 hundred ninety people to qualify, 12 particularly since the incidence was not 13 infinitesimal. The incidence probably was 14 somewhere not too far away from my 10 percent 15 level.</p> <p>16 The process of doing the interview, 17 the telephone interview, was also very 18 inappropriate. There is no -- there was no 19 procedure to contact a specific individual 20 and household. He just talked to or his 21 interviewers talked to anybody who answered 22 the phone. Proper telephone technique would 23 indicate you have to use some kind of control 24 to be sure that you get some kind of 25 representative sample of people, at least</p>	<p style="text-align: right;">Page 184</p> <p>1 McCullough 2 likely home and most likely answering the 3 phone. Even if there are men and women both 4 being home at the same time, there's a known 5 phenomenon that woman are more likely to pick 6 up the phone than the man. 7 There is also no record of when the 8 phone calls were made, and that may be part 9 of problem. If a lot of dialing was done 10 during the daytime, well, then you have an 11 additional probability of getting more women 12 than men, because more women were home. Even 13 though a number of them work, there's still a 14 number of them that are home. I don't have a 15 record of when they were called, but maybe 16 that's some explanation as to why so many 17 phone numbers had to be called to result in 18 the number of people surveyed. 19 So the sampling was really quite 20 bad, among the worst I've seen in terms of 21 the telephone selection procedure. 22 In terms of the actual interview 23 situation, the -- the interview was -- on the 24 Internet situation was really I think quite 25 -- quite poor. The more -- the more items</p>
<p style="text-align: right;">Page 183</p> <p>1 McCullough 2 when you initially talk to them before you 3 actually then try to find somebody who's 4 qualified. 5 So there's no issue -- no control 6 on the sex of the individual. There's no 7 control on the age of the individual. 8 There's no control on anything in terms of 9 dialing that number. And part of the 10 evidence of this improper procedure is I 11 think in 64 percent of his surveys is 12 females. Now, it's hard to believe that 64 13 of the people who buy printers or are likely 14 to buy printers are female to start with. 15 Just intuitively that doesn't make sense. 16 But if you look at the mechanics of what he 17 did, I can understand how he got there, and 18 what that is is that there's a proclivity, a 19 well-known proclivity, of women to be more 20 likely to answer the phone than men. And 21 since he didn't have any procedure set up in 22 terms of the telephone interview situation, 23 he probably got a very disproportionate level 24 of women who he was talking to initially 25 because they were the ones who are most</p>	<p style="text-align: right;">Page 185</p> <p>1 McCullough 2 you put into this procedure that he did, 3 obviously the fewer -- the fewer things 4 people are going to click on. As a matter of 5 fact, Dr. Jacoby indicated -- this in his 6 deposition -- that the more -- the more items 7 that you put into something, the more likely 8 there are other people clicking on -- on 9 fewer of them, percentagewise at least. 10 As a matter of fact, I think he 11 said at one point, you know: I really could 12 have been really bad, and put in a hundred of 13 them, and then, you know, where would you 14 guys have been? So I only put in 28. But 15 yet he cites a scholarly piece of research 16 that says that many people access, I think he 17 said, between nine and twelve in this piece 18 of research. So if people normally access 19 nine to twelve items -- I assume that that 20 scholarly piece that he cites is correct -- 21 then that means by definition, a lot of 22 people aren't going to access the 28 items or 23 many of the 28 items. 24 The length of the interview was 25 also of great concern to me. He in both of</p>

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<p>1 McCullough 2 initial screening and also again the 3 information appears on the screen, the 4 respondents said (sic) that the interview 5 will take about ten minutes to be 6 administered. Dr. Jacoby I believe in his 7 deposition had said it would be around ten 8 minutes. So I'm looking eight to nine, some 9 would be ten to twelve, whatever, but from 10 what I see from the tables, which are 11 Appendix I and Appendix J tables, if I -- if 12 I'm remembering the numbers correct, it looks 13 like the interview on average took around 39 14 minutes. Some of the data is not completely 15 clear there, but that's the best I could -- I 16 could -- I could do. And as he indicated in 17 his deposition, I think, when the interview 18 gets particularly long, particularly beyond 19 the expectation period that you created for 20 people, people pay -- tend to pay less 21 attention to it, and are less concerned. So 22 as the interview is -- if the interview -- if 23 I'm correct, and the interview was as long as 24 I think I'm understanding from his report, 25 then a lot of people would be expecting it to</p>	<p>Page 186</p> <p>1 McCullough 2 He also acknowledges at one point 3 in time that he realized that there are some 4 people weren't paying attention, and he 5 retabulated the data to take out people who 6 accessed zero, one or two features. And he 7 -- he -- I think he took 38 people or 8 something like that out. He had a base of 9 one fifty two I think it was, in that area, 10 on that -- on that base. But the reduction 11 of people who were zero, one or two is really 12 kind of arbitrary on his part. I think he 13 said he didn't go beyond two, because it 14 might have affected some people who picked 15 adaptive lighting as one of the features. 16 But what that's -- what his -- what he 17 indicated by doing this retabulation was the 18 fact that he acknowledged and realized that a 19 number of people weren't paying attention to 20 the interview, but did he go far enough, and 21 did he take enough people out. 22 And then if he realized these 23 people weren't paying attention, and he 24 reduced it, and he ran a whole set of 25 retabulations that completely mirrored that</p>
<p>1 McCullough 2 be ten minutes, and it turns out to be 39 3 minutes, once it gets beyond a certain point, 4 they're not going to be paying real attention 5 to it.</p> <p>6 Which may also explain one of the 7 reasons that he went for the 10- dollar to a 8 20-dollar to a 50-dollar incentive, part of 9 which he attributes to the fact that it had 10 to be done in a short period of time but part 11 of which also may be due to the fact that 12 people were not completely on task, because 13 they realized that they were told something 14 that wasn't true.</p> <p>15 But then people -- then you have 16 the question of, well, what about the people 17 who -- who actually tried to go through the 18 interview, once they got beyond the 19 expectation time limit of what you told them 20 a couple of times, are they going to go 21 through the process with any degree of 22 diligence once they've already gotten to the 23 10-, 15-minute period, and the interview is 24 still not even close to being over. So 25 there's a real issue there as well.</p>	<p>Page 187</p> <p>1 McCullough 2 retabulation on this reduced base of one 3 fifty two, then my question would be why 4 wouldn't he then report the one fifty two and 5 not the one ninety, because basically what 6 he's saying is those people didn't honestly 7 -- didn't honestly complete the interview, 8 based upon his own interpretation, even 9 though he may be -- he may be cutting off at 10 an arbitrary point. He should at least, I 11 think, said, okay, well, I'm going to take 12 those people out, I'm not going to count 13 them, because they really didn't pay 14 attention. Obviously people may click on 15 anything.</p> <p>16 The other thing about the 28 17 different items there is that a number of 18 them were items that were not features really 19 but they really were descriptions or 20 indicators of the brand. For instance, 21 "Manufacturer" was one thing you had to click 22 on to see who manufactured the product. 23 "Model" was number. "Picture" was another. 24 I think "Dimensions" might have been another 25 one. There was a number of things up top,</p>

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<p>1 McCullough 2 before you got to the real features, that 3 instead of just being presented as well, 4 here's the so-and-so printer that's made by 5 so-and-so, and this is the model number, and 6 now I want you to click on "Features." They 7 had to go through the task of going through 8 each one of these items before they got to 9 anything what I would call really features, 10 as opposed to just descriptives of what they 11 were talking about. So the task was made 12 very onerous on people because of that. And 13 I think they had like seven or eight of them 14 that came before any of the features that 15 were there. 16 He then goes on later on in the 17 questionnaire or in the interviews in the 18 simulation interview and, as I indicated 19 before, he only asked people who clicked on 20 one of these features whether it was 21 important or not, and that's an assumption 22 that doesn't make any sense at all. As I 23 indicated before, I mean does that mean that 24 any 25 percent of the people won't be able to 25 make the machine (sic)?</p>	<p>Page 190</p> <p>1 McCullough 2 You began by saying that you had a 3 criticism of the objective as stated of the 4 Jacoby survey. Let's look on page two of his 5 report? 6 A. Yes. 7 Q. What's wrong with the objectives as 8 stated on page two of Exhibit 17? 9 A. (Reading) Well, it doesn't go to 10 the value of the -- of the feature, and I 11 thought that was what was appropriate for the 12 situation, not just to find out if people 13 normally go to acquire information, even 14 though he didn't do that appropriately, but 15 forgetting how he did it versus the -- the -- 16 the objective, I think -- I thought the 17 objective was more to try to put a value on 18 -- on this adaptive lighting technology from 19 a consumer point of view, and this doesn't do 20 it. 21 Q. In your survey you identify the 22 objective that you were aiming at, and in his 23 Jacoby identifies the objective that he's 24 aiming at. Based on what do you say that the 25 objectives stated by Jacoby are not</p>
<p>1 McCullough 2 THE COURT REPORTER: I don't 3 understand what you just said. Could 4 you speak a little more clearer? 5 A. (Continuing) Does that mean that 25 6 percent of the people do not make the 7 machine? Does that mean that -- don't care 8 who makes the machine, I'm sorry. Does that 9 mean that 72 percent of the people don't 10 think the red eye reduction is important? Et 11 cetera. I mentioned this earlier before, but 12 it's kind of sequentially looking at the 13 questionnaire in terms of the design issues. 14 So I don't think that -- in sort of 15 summarization, I think the study was off 16 target. The design, I thought, was really 17 very inappropriate. I think his own -- his 18 own findings I think showed to be 19 inappropriate. I think he made a lot of 20 assumptions which were incorrect, and I think 21 the -- the whole thing was set up in such a 22 way that it was looking for a predetermined 23 conclusion. 24 Q. So let me go back and ask you about 25 some of these things in particular.</p>	<p>Page 191</p> <p>1 McCullough 2 appropriate? 3 A. Well, I thought part of the issue 4 in this case was to determine -- I thought -- 5 as the lawyers described it to me, I thought 6 the objective that I had was the one that was 7 important to the damages issue in the case. 8 Q. So that objective that you had 9 comes from your discussions, but is there -- 10 as a matter of survey expertise or 11 methodology, is there something a priori 12 wrong about the objectives that Jacoby 13 described? 14 A. No. It -- it -- no. No. If you 15 think that these objectives fit into some 16 part of the case that you're trying to 17 present, then no, there's nothing that in 18 itself would say these objectives are wrong, 19 even though I think he achieved the 20 objectives, but that's a different story. 21 Q. You said a second (sic), as I heard 22 it, that you believe that the design of the 23 Jacoby survey would a priori be expected to 24 lead to a result that adaptive lighting had a 25 low level of importance, or I think your</p>

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<p style="text-align: right;">Page 194</p> <p>1 McCullough 2 words were unlikely that adaptive lighting 3 could have a high level of importance. Why 4 do you say that with respect to adaptive 5 lighting as compared to any of the other 6 items that people could click?</p> <p>7 A. Well, some of the other items were 8 also -- were also low, but adaptive lighting 9 was one that didn't have any definition put 10 to it, and some people who were looking at it 11 might have thought it being something very 12 technical instead of something that just made 13 sense just based on the name. That's one -- 14 one set of respondents.</p> <p>15 Another set of respondents may have 16 understood what it was -- I don't know how 17 many people do or not -- in which case there 18 is no need for them to click on it. But if 19 then they don't click on it because they 20 don't think there's a need to click on it or 21 conversely they don't click on it because 22 they don't understand I think a technical 23 thing, they don't need to look at, none of 24 those people are asked the importance 25 question. So he's made the assumption that</p>	<p style="text-align: right;">Page 196</p> <p>1 McCullough 2 the importance level, by definition, has to 3 be much lower than it would have been if you 4 had asked everybody about the importance. 5 Q. But is there -- let me sharpen my 6 question. Is there something specific about 7 the treatment of adaptive lighting in this 8 survey as compared to the other things that 9 leads you to expect that adaptive lighting 10 would not be given a high level of importance 11 as compared to other things?</p> <p>12 A. Well, it may be less likely to be 13 clicked on because it's not -- it's not -- 14 it's not obvious what it is from just looking 15 at the name, whereas red eye removal is 16 pretty amaze -- pretty obvious. "Requires a 17 computer" is pretty obvious. "Has a photo 18 tray" would be pretty obvious. "Has external 19 color image displays." A lot of these are 20 self-descriptive, but "adaptive lighting" is 21 not descriptive. So he could have presented 22 a definition for it that would have been 23 understood by people, and therefore maybe 24 people would have been (inaudible) on how 25 important it was to them.</p>
<p style="text-align: right;">Page 195</p> <p>1 McCullough 2 if they didn't click on it, I'm not going to 3 ask them about how important it is, even 4 though there are two possible explanations of 5 why somebody would not be clicking on it. 6 And why wouldn't he ask the importance 7 question? It's all of them.</p> <p>8 Q. But let me ask about red eye 9 removal as a point of comparison.</p> <p>10 Do you think there's something 11 about the design of the Jacoby survey that 12 a priori would lead you to expect that people 13 would rank red eye removal relatively more 14 important and adaptive lighting relatively 15 less important?</p> <p>16 A. I can't speak to any one specific 17 item because I don't know, but the concept 18 basically is if you give them 28 items to 19 click on, if you tell them the interview's 20 going to be ten minutes, and it turns out to 21 be a lot longer than that, and a number of 22 the items that are up front are the ones that 23 are descriptive and not really attributes, 24 and you don't ask the importance question to 25 the people who don't click on the item, then</p>	<p style="text-align: right;">Page 197</p> <p>1 McCullough 2 Q. Did you yourself go through the 3 experience of taking this survey? 4 A. Yes, I did. 5 Q. So you looked at the description of 6 adaptive lighting, as well as the other 7 descriptions? 8 A. I didn't look at all of them. I 9 went through it just to go through the 10 process to see what -- I didn't -- I didn't 11 have the time to go through the whole 12 interview. 13 Q. And so you noticed that you could 14 click on "Adaptive Lighting" -- 15 Did you click on "Adaptive 16 Lighting"? 17 A. I don't remember. Sorry. 18 Q. And are you aware that if you do 19 click on "Adaptive Lighting," the screen 20 gives you a description of what adaptive 21 lighting is? 22 A. But you have to click on it first, 23 right? 24 Q. Do you have any quarrel -- do you 25 have any criticism of the description of</p>

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<p>1 McCullough 2 adaptive lighting as given? 3 A. No. No. 4 Q. All right, you mentioned that 5 "Requires a computer" you said would be 6 somewhat self-explanatory. 7 A. Right. 8 Q. Doesn't that mean that people would 9 be less likely to click on it? 10 A. At least they know what it is. 11 There's two groups of people there. They're 12 less likely to click on it in some, and 13 there's some that maybe even say, well, I 14 want to see if the question's yes or no. 15 Because I think there's a question 16 mark there. Right? 17 Q. And if there weren't a question 18 mark, and if it just said "Requires a 19 computer," wouldn't that then be a 20 declaratory statement -- 21 A. Right. 22 Q. -- with nothing further (speaking 23 simultaneously) -- 24 A. (Speaking simultaneously) -- a 25 question mark --</p>	<p>Page 198</p> <p>1 McCullough 2 A. I didn't pay attention to that 3 detail. I'm sorry. 4 Q. Without regard to -- 5 MR. BUCHANAN: Strike that. 6 Q. So it would be your view that the 7 survey design doesn't give you a basis for a 8 particular number that represents the 9 importance of any one item, such as 10 identifying -- such as adaptive lighting. 11 A. Correct. 12 Q. Now, how about the range of numbers 13 from one to another? Do you think the survey 14 is fairly designed to ascertain that the 15 manufacturer's name is relatively more 16 important and adaptive lighting is relatively 17 less important? 18 A. Not necessarily. There's a lot of 19 biases that go into each of these. 20 "Manufacturer's name" was in the front, in 21 the beginning of the listing, and by 22 definition, if you click on it, which I think 23 75 percent roughly I think clicked on that, 24 by definition, you're asking the importance 25 question. If you then click on the adaptive</p>
<p>Page 199</p> <p>1 McCullough 2 THE COURT REPORTER: I'm sorry. 3 THE WITNESS: I'm sorry. 4 I'll take your admonishment. 5 (Laughter). 6 A. (Continuing) Yes, if there were no 7 question mark there, it would be more a 8 descriptive statement, which I'm not even 9 sure it would be even necessarily be in there 10 then, because it's just a -- it's not a -- 11 not something necessarily you have to -- you 12 have to say possibly. 13 Q. Did you -- do you recall looking at 14 the item that read "Requires a computer," 15 question mark? 16 A. I'm sorry, I can't remember any 17 specific thing. I went through the 18 questionnaire I think twice, but it -- I was 19 going through it not necessarily remembering 20 everything I did. I didn't take a record of 21 what I did. I don't remember. 22 Q. And is it your understanding that 23 the printer being tested here has some 24 functions that it can perform without being 25 connected to the computer?</p>	<p>Page 201</p> <p>1 McCullough 2 lighting, you won't ask the importance 3 question, even though you probably should 4 have done. 5 Q. You will recall that the -- that 6 there's an initial screen where you can -- 7 where the respondent can -- is presented 8 three -- a category of "General Information," 9 a category of "Features" and a category of 10 "Technical Specifications." 11 A. I do. 12 Q. Are you saying that there's a 13 primacy effect as to how those three 14 categories were presented on that screen? 15 A. Well, I think there would be an 16 inclination to start at the top and maybe 17 work your way down, which is not unusual. 18 Q. What do you mean by start at the 19 top? 20 A. "Manufacturer," the first item. 21 Q. But in order to -- so the first 22 screen presents categories of General 23 Information or Features or Technical 24 Specifications. Are you with me on that? 25 A. Yes.</p>

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<p>Page 202</p> <p>1 McCullough 2 Q. And then if you click on General 3 Information -- 4 A. Um-hm? 5 Q. -- then underneath that you get 6 subcategories which include Manufacturer's 7 Name -- 8 A. Right, um-hm. 9 Q. -- Model Name -- 10 A. Right. 11 Q. -- Functions, Suggested Retail 12 Price, Picture of Unit, Dimensions and 13 Warranty Information. 14 A. So that's by somebody who's not -- 15 probably would be -- many people would be 16 likely to do that first, to find out what 17 brand they're talking about, what model 18 they're talking about. And again, now 19 they're into the interview, and they've spent 20 a certain amount of time already, and they're 21 expecting to only spend ten minutes. 22 Q. So it's your opinion that people 23 are more likely to begin by clicking on 24 General Information and less likely to begin 25 by clicking on Features.</p>	<p>Page 204</p> <p>1 McCullough 2 in the Jacoby survey? 3 A. I can't really attest to what the 4 numbers on -- from -- I think his survey has 5 an awful lot of problems. I can't really 6 (inaudible) any of the numbers in the survey, 7 so -- 8 THE COURT REPORTER: "I can't" 9 what? 10 A. -- believe any of the numbers in 11 the survey, based on the criticism I made. 12 But I would think it would be an important 13 feature in a lot of people. 14 Q. On what basis do you think it would 15 be an important feature to a lot of people? 16 A. Just my own layperson knowledge of 17 people, you know, looking at photos, and 18 talking to people, I would think that's an 19 important feature. 20 Q. All right. You said that the cons 21 -- are you critiquing the concept of 22 presenting people with a simulated Internet 23 experience of clicking on information? 24 A. Yes. That's -- that's the proper 25 -- that's the proper method, based upon what</p>
<p>Page 203</p> <p>1 McCullough 2 A. I think that there's an inclination 3 that a lot of people do that. I can't -- 4 that can be -- that can be tested. I can't 5 test it, because I don't have the ability to 6 test that. I don't have data in that format. 7 But I would think that's likely. 8 Q. Now, you mentioned that in your 9 view, the treatment of Red Eye Removal was 10 particularly extreme. Why do you say that? 11 A. No, the point I was making was that 12 I think 72 percent of the people did not 13 click on it, which meant that 72 percent of 14 the people were not asked the importance 15 question about red eye removal. The reason I 16 say extreme is the number was real high. 72 17 percent of the people not clicking on it 18 means 72 percent of the people were excluded 19 from being asked the importance question, and 20 therefore, by Dr. Jacoby's method, an 21 assumption was made that that's not important 22 to them. 23 Q. And did you have a basis for 24 asserting that red eye removal is important 25 to a higher percentage of people than shown</p>	<p>Page 205</p> <p>1 McCullough 2 he's trying to do. 3 Q. All right. And one of the 4 critiques that I heard you state was that 5 likely in the actual world people would go to 6 more than one source of information. Why is 7 that a basis to critique an Internet 8 simulation of the type that Mr. -- Dr. Jacoby 9 did? 10 A. Well, he's not allowing -- he's not 11 allowing for that possibility. He's assuming 12 that all the information that people get, it 13 could be compressed within this simulation 14 that he's created. 15 Q. But why does that -- any survey is 16 inherently sampling some aspect of the real 17 world at large that goes on broader, longer 18 or deeper. 19 Why is that particular phenomenon a 20 critique of this type of simulation? 21 A. Well, I mean I could -- the 22 simulation seems to be not replicating a 23 process that is -- is the common experience. 24 And what you try to do in a simulation is you 25 try to represent some degree of what's likely</p>

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<p>1 McCullough 2 to happen in the real world. 3 When a hundred and ninety six 4 people that you've identified as being 5 eligible for your survey can't do the survey 6 because they don't have Internet capability 7 or availability, that says something about 8 whether Internet is a reasonable thing for -- 9 a reasonable method of simulation. When 74 10 percent of the people who have bought a 11 printer in the past year indicate that they 12 bought at the retail store, that's indicating 13 that retail stores are particularly important 14 in the purchase of these equipment. When 50 15 percent or -- or 45, 50 percent of the people 16 who -- in your own study who purchased a 17 printer in the past year say that they did 18 not go on line to get information about 19 printers before they bought the printer, 20 that's another thing saying that the Internet 21 may not be the right vehicle to do the 22 simulation.</p> <p>23 And the simulation, you set it up 24 in such a way that there's so many -- so many 25 choices to make in such a limited amount of</p>	<p>Page 206</p> <p>1 McCullough 2 simulation studies? 3 A. I mean the studies I do -- I mean 4 even the study I did is to some extent a 5 simulation. I'm just saying it wasn't the 6 some type of simulation he tried to do. 7 I can't recall any others there 8 that I've done. I probably have, but it -- 9 I've done so many studies over so many years, 10 and it's just not coming to me. 11 Q. Are you familiar with any academic 12 literature on on-line survey simulations? 13 A. No. 14 Q. You've mentioned that a hundred 15 ninety six people didn't participate in the 16 Jacoby survey because they didn't have 17 Internet availability. Now, to begin with, 18 something very simple: It's certainly true 19 that people could not have done the Internet 20 on-line simulation if they didn't have 21 Internet availability, right? 22 A. Exactly. 23 Q. So it's not surprising that those 24 hundred ninety six didn't participate. 25 A. It's not surprising that they</p>
<p>1 McCullough 2 time that if you don't click on a certain one 3 of these items, you're -- you're -- you're 4 cut out of the availability of expressing 5 your importance of the item, which is just 6 wrong.</p> <p>7 Q. Do you believe your survey was a 8 closer simulation of real world conditions?</p> <p>9 A. I wasn't really trying to do a 10 purchasing simulation study. What I was 11 basically trying to do is ask people to look 12 at a product and in the context of if they 13 were thinking about this product -- thinking 14 about buying this product, but I wasn't 15 trying to simulate the full process, as he 16 was trying to do, and I wasn't excluding 17 people, and I wasn't giving them an over -- 18 an overly ambitious task. It was a very 19 different type of an interview.</p> <p>20 Q. Have you ever done any simulation 21 studies in your own work, whether in business 22 settings or litigation settings?</p> <p>23 A. Nothing of this type exactly that 24 he did, I don't think. I can't recall any.</p> <p>25 Q. Have you done anything that's</p>	<p>Page 207</p> <p>1 McCullough 2 couldn't have participated, by definition. 3 Q. Now, is there any reason to think 4 that the people who did participate formed a 5 sub-sample that was biased in some 6 characteristic as compared to those who 7 didn't participate?</p> <p>8 A. There's no way to really know that 9 except the fact that some people don't have 10 Internet capability and there are more of 11 them that are actual respondents in the study 12 suggest that they could be. There could be 13 big differences in each group.</p> <p>14 Q. What differences could there be 15 that would be relevant to the objective of 16 the Jacoby survey?</p> <p>17 A. I guess it's hard to know where to 18 start, because there's so many issues and 19 problems here. When you have a universe 20 which is what he would describe -- and we 21 both described that in a similar fashion -- 22 you try to have a sample that replicates the 23 universe as the best you can, but then when 24 you start taking out large groups of people 25 out of that universe -- or out of that</p>

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<p>1 McCullough 2 sample, rather, you then distort the 3 universe. What kinds of problems that 4 causes, who knows, but it -- it -- it 5 distorts the -- it distorts the sample. It 6 distorts your representation of that sample 7 representing the universe. And there's a 8 large group of people that he took out of 9 that sample, that were part of the universe. 10 So who knows what kind of bias is 11 removed here? You don't know, because we 12 don't know what these other people, how they 13 would have answered the questions if they 14 could have been asked the questions in a 15 non-on-line manner.</p> <p>16 Q. Based on your experience in working 17 with at least hundreds of surveys, do you 18 have a belief that the sample that ultimately 19 answered the Jacoby survey was 20 non-representative in a way that's relevant 21 to the objectives?</p> <p>22 A. It probably is, yes. I would say 23 yes.</p> <p>24 Q. And what is it?</p> <p>25 A. Well, it's the fact that it was</p>	<p>Page 210</p> <p>1 McCullough 2 Q. In your own survey, did you find a 3 difference in responses between females and 4 males? 5 A. I didn't analyze that. 6 Q. Do you have -- have you checked to 7 see whether there was a substantive 8 difference in the responses to the Jacoby 9 survey as between females and males? 10 A. No, I have not done -- I have not 11 done that. 12 I think I -- I probably can do 13 that, because I do have some raw data, but I 14 must point out the raw data doesn't -- 15 doesn't give me a hundred ninety 16 respondents. For some reason, the data that 17 I was given, it looks like 249 respondents, 18 so I haven't been able to retab anything, 19 because I don't have the right base. There's 20 something wrong with the data file he gave 21 me. So I can't go back and do any tabs until 22 I get that straightened out. I mean I can't 23 straighten it out. You'd have to straighten 24 it out for me. 25 Q. Did you -- do you have any -- based</p>
<p>Page 211</p> <p>1 McCullough 2 such a major exclusionary -- certain large 3 number of people excluded from the sample. I 4 can't tell you exactly how the answers would 5 have differed, because obviously they weren't 6 interviewed, but when you have a sample where 7 you exclude a large number of people and many 8 or more people than you actually have in your 9 own survey, there's a likely bias that 10 develops.</p> <p>11 Q. And so -- I'll ask the question 12 again -- based on your experience in surveys, 13 do you have a belief as to what 14 characteristics of those who did answer is 15 non-representative in a way that's relevant?</p> <p>16 A. I -- I can't -- I can't answer the 17 question with any specifics in mind, because 18 I don't know what answers you people (sic) 19 would have given if they had been 20 administered a -- a similar study that wasn't 21 done on-line.</p> <p>22 Q. One thing that you mentioned was 23 that -- you said 64 percent of the 24 respondents were female.</p> <p>25 A. Yes.</p>	<p>Page 213</p> <p>1 McCullough 2 on your experience, do you have any reason to 3 believe that females have different answers 4 as compared to males in a way that's relevant 5 to the objectives of this study? 6 A. I mean nobody can answer that 7 question, because we don't really know what 8 the answers would be. 9 And why mention the female 10 difference? It's just something that was in 11 his tables that was obvious. That's not to 12 say there aren't age issues also, because he 13 didn't -- in the screening technique that was 14 used for the telephone interview, there were 15 no controls based upon getting people in 16 terms of the right age groups or -- or the 17 right gender groups, so that could be all 18 messed up as well. 19 Q. And are you able to identify any 20 specific way in which you believe that age 21 might lead to a non--- excuse me, 22 non-representative sample in a way that's 23 relevant to the objectives of the study? 24 A. These are the things that you 25 really can't prove one way or the other, and</p>

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<p>Page 214</p> <p>1 McCullough 2 that's why one has to follow good research 3 technique, and if you don't follow good 4 research technique, you have all of these 5 pondering questions that you can't prove that 6 -- that -- that certain parts are not 7 representative for the most part, but you 8 just know that if you don't do good sampling 9 procedures and you don't do appropriate 10 interviewing situations, that the sample that 11 you're likely to wind up one is one that is 12 not representative. You can't necessarily 13 identify how it is not representative. But 14 that's the whole reason for following good 15 interviewing procedures, is that so you don't 16 have to worry or ask that question.</p> <p>17 Q. I think you said that there was, 18 you said, no record of when the phone calls 19 were made.</p> <p>20 Have you seen the -- the file of 21 raw data that we provided?</p> <p>22 A. I have seen the raw data.</p> <p>23 And maybe -- you're right, maybe 24 there is some time frame on that, but I don't 25 know -- those are the only the interviews</p>	<p>Page 216</p> <p>1 McCullough 2 number of thousand where the telephone was 3 disconnected, and some number of thousand 4 where the phone wasn't answered, and so forth 5 and so on?</p> <p>6 A. Well, if you look at Appendix G, 7 which I think this is in, I think those are 8 the ones that are subtracted out of that 9 number. Well, there are certain components 10 that I saw, but why those numbers get so 11 high, it's hard to know.</p> <p>12 I don't know if I have G in here. 13 Can we be sure?</p> <p>14 Q. If you start at the back, I think 15 you'll see there's K and then J and then I 16 and then H and then --</p> <p>17 A. Appendix G.</p> <p>18 Q. -- a vertical columns that says --</p> <p>19 A. Oh, it's on the back of the page.</p> <p>20 That's front and back.</p> <p>21 MS. KINGSBURY: And I want to 22 point out that this exhibit only 23 includes the hard copies of the 24 appendices, it does not include 25 electronic versions, which include</p>
<p>Page 215</p> <p>1 McCullough 2 that are completed, those are not -- not all 3 the attempts, so I have a partial record. I 4 probably could -- if I could get the hundred 5 ninety parsed out of that two forty nine 6 whatever that the file I've got have, I could 7 then see how many people were interviewed 8 during certain times of the day. I wouldn't 9 know about the rest of the situation, in 10 terms of the people who weren't contacted.</p> <p>11 I was trying to explain the 12 possibility of why -- why it took 210,710 13 phone calls to get respondents, because 14 that's out of sight. I've never seen 15 anything so huge like that in terms of 16 database.</p> <p>17 Q. And did you see Dr. Jacoby's 18 deposition testimony on that subject?</p> <p>19 A. He kind of passed the buck to the 20 people who were doing the -- doing the 21 interviewing. He kind of divorced himself 22 from -- he said those are left up to the 23 experts, I think, in TNS, whoever did the 24 interviewing.</p> <p>25 Q. And did you see there were some</p>	<p>Page 217</p> <p>1 McCullough 2 Appendix C, Appendix I and Appendix J. 3 Therefore --</p> <p>4 MR. BUCHANAN: Sure thing. And -- 5 and let's clarify that.</p> <p>6 Q. You have seen, Mr. McCullough, the 7 CD that's Appendix C, and it has on it a 8 sample --</p> <p>9 A. Yes.</p> <p>10 Q. -- of this survey?</p> <p>11 A. Yes.</p> <p>12 And that's the one I told you that 13 was imprecise?</p> <p>14 Q. No, I'm asking you something 15 different.</p> <p>16 A. Oh.</p> <p>17 Q. Appendix C was a CD where when you 18 loaded it up you can click through the survey 19 yourself (speaking simultaneously) --</p> <p>20 A. That one? I did that. Yes, I did</p> <p>21 use that.</p> <p>22 Q. So you did get that.</p> <p>23 A. Yes, I did. Thank you.</p> <p>24 Q. And another CD had Appendix I and 25 Appendix J, if I'm recalling the letters</p>

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<p>1 McCullough 2 correctly, which were some tables. 3 A. I've -- I've -- I've looked through 4 I and J to see the tables. Yes, I'm aware of 5 those. 6 Q. And finally, to complete further, a 7 couple -- I've forgotten -- one week, two 8 weeks ago I -- we provided a CD which 9 provided raw data -- 10 A. That's the one I told you -- 11 Q. -- (speaking simultaneously) also. 12 A. That's the one I told you -- 13 THE COURT REPORTER: I'm sorry. 14 Counsel and the witness -- 15 (Discussion off the record.) 16 (Record read as follows: 17 "Question: And finally, to 18 complete further, a couple -- I've 19 forgotten -- one week, two weeks ago we 20 provided a CD which provided raw 21 data" -- 22 Q. -- and you have seen that as well. 23 A. I have seen that, and that's the 24 one I'm mentioning to you has I think 249 25 respondents on it, not one ninety, and I</p>	<p>Page 218</p> <p>1 McCullough 2 A. No, I don't think so. Those are 3 the people who theoretically, by definition, 4 would have qualified for it. They didn't all 5 go on and do the survey, because the survey 6 is only a hundred ninety. So some of them 7 didn't. 8 But there are other categories here 9 which I'm not really sure what's in them. 10 Like, for instance, the "Soft Refusal," I 11 don't know what that means exactly in this 12 context. Does that mean people who qualified 13 or didn't want to interview? Does that mean 14 that they weren't -- they weren't going to -- 15 they weren't going to cooperate with the 16 screener? It's just not clear what that 17 means. 18 It just was astounding to me -- and 19 I've done a large number of telephone 20 interviews over the years -- that there were 21 215,000 numbers, many of whom weren't called, 22 210,710 numbers who were called that resulted 23 in so few interviews. There's a lot going on 24 here that I don't think is clear just from -- 25 from -- from this one little chart, and --</p>
<p>1 McCullough 2 don't know what the discrepancy is all about. 3 Q. And counsel's correct, we don't 4 have those CDs here today, but you've seen 5 them. 6 A. I have seen the ones that you 7 mentioned, yes. 8 MS. KINGSBURY: One further 9 clarification is I should have said it's 10 only part of Appendix C that's not 11 attached here, because there is -- there 12 are some hard copy documents in 13 Appendix C, but the rest of it is the 14 simulation, the actual electronic 15 survey. 16 THE WITNESS: Okay. 17 Q. So now let's go back to Appendix G, 18 which is on the reverse side of the page it 19 says G, and you say up at the top it says 20 "complete counts 676"?" 21 A. Yes, I do. 22 Q. All right. Is it your 23 understanding that that's the number of 24 people who did go ahead and undertake a -- 25 the -- the online survey?</p>	<p>Page 219</p> <p>1 McCullough 2 I'm sorry. 3 Q. You mentioned that the Soft Refusal 4 category, you said you don't understand what 5 that means. Are there any other categories 6 stated here that you don't understand what 7 they are? 8 A. Well, probably there are. I mean 9 let me just look through them. 10 I presume this is a final 11 disposition report as opposed to a cumulative 12 one, so I start with that premise. For 13 instance, by -- what I mean by that if they 14 got a busy signal when they called the first 15 time but the second time they got a complete, 16 that that number would have come out of Busy 17 Signal and would have gone into Complete, so 18 I'm making that kind of assumption, that this 19 is a final disposition report, even though it 20 doesn't say that. 21 The Telephone Answering Device 22 being 33,600, I understand what that is, but 23 was the calling done at different times of 24 the day, on different days, the callbacks? I 25 don't know about that, because I don't think</p>

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<p style="text-align: right;">Page 222</p> <p>1 McCullough 2 Dr. Jacoby knew that either. He kind of said 3 he left it up to the people at TNS to decide. 4 Good telephone procedure usually has you 5 making three to four telephone calls to any 6 one household at different times of the day 7 on different days. Whether that was followed 8 or not, I don't know, but there seem to be a 9 large number of -- of attempts here that 10 didn't result in anything successful, so it 11 raises a very big question in a researcher's 12 mind about how this was actually done, 13 because it's -- it's an astounding number of 14 calls for a hundred ninety interviews with an 15 incidence level that's somewhere around 10 16 percent. It just doesn't compute.</p> <p>17 Q. You mentioned that the money 18 incentive provided was increased from \$10 to 19 \$20 to \$50. Do you have any basis for -- do 20 you believe that that, in some way that's 21 relevant, biased the sample?</p> <p>22 A. No, I wouldn't complain about that.</p> <p>23 Biasing the sample, I think I was 24 using it as a possible explanation of -- of 25 the fact that the interview was a lot longer</p>	<p style="text-align: right;">Page 224</p> <p>1 McCullough 2 survey for a while now. Have you formed any 3 other opinions about it beyond the ones that 4 you've told me?</p> <p>5 A. I can't think of any. I think I 6 told you the main ones I can think about. 7 (Inaudible) off the top of my head.</p> <p>8 THE COURT REPORTER: What was that 9 last?</p> <p>10 A. (Continuing) I'm doing it off the 11 top of my red head.</p> <p>12 THE WITNESS: My voice is getting 13 raspy. I'm sorry.</p> <p>14 MR. BUCHANAN: Counsel, I propose 15 another break.</p> <p>16 MS. KINGSBURY: Okay.</p> <p>17 THE VIDEOGRAPHER: Going off the 18 record. The time is 2:30 p.m. This is 19 the end of tape four.</p> <p>20 (Recess taken.)</p> <p>21 THE VIDEOGRAPHER: We are back on 22 the record. The time is 2:56 p.m. This 23 is the beginning of tape five.</p> <p>24 Q. Mr. McCullough, based on the work 25 that you have done in the case, have you</p>
<p style="text-align: right;">Page 223</p> <p>1 McCullough 2 than -- than -- than advertised, and perhaps 3 that was a reason why or one of the reasons 4 why it had to be increased from 10 to 20 to 5 50, because, you know, it was more than a 6 ten-minute interview, and people weren't 7 going to -- weren't going to do it if the 8 interview wasn't as long as they think it 9 was, for ten bucks.</p> <p>10 Q. And do you believe that that in 11 turn led the results to be unreliable?</p> <p>12 A. Not by itself, no. I wouldn't 13 criticize that.</p> <p>14 Q. And in case my question wasn't 15 clear, if you're right in inferring that 16 people were led to believe the time would be 17 ten minutes, and it turned out to be an 18 average of 39, do you believe that that in 19 turn led to results that are unreliable?</p> <p>20 A. It may have to some extent caused 21 people to pay less attention to the 22 interview, and click on fewer things just to 23 get done with the interview if they feel they 24 were taken advantage of.</p> <p>25 Q. We've talked about the Jacoby</p>	<p style="text-align: right;">Page 225</p> <p>1 McCullough 2 formed an opinion on what customers would be 3 willing to pay to get the use of the adaptive 4 lighting feature?</p> <p>5 A. I can -- not exactly in those 6 terms. Actually, it's the -- I determined is 7 what they think the value of it is, which is 8 slightly different.</p> <p>9 Q. And first of all I'll ask you what 10 did you determine, what dollar number?</p> <p>11 A. Well, as a round -- as a round 12 number I would use the numbers that came from 13 the median, which is around \$20 I think for 14 the less expensive machine, and then about 15 \$50 for the more expensive printer.</p> <p>16 Q. And now I'll ask you what's the 17 difference, as you used the terms on the one 18 hand, the perceived value of the feature and, 19 on the other hand, in my words, what 20 customers would be willing to pay for the 21 feature?</p> <p>22 A. Well, they could be the same, but 23 the way I was asking the question was it was 24 what they think the value of that is, and I'm 25 not even sure that these people would</p>

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<p>1 McCullough 2 necessarily actually buy this -- you know, 3 that printer.</p> <p>4 Q. So then what does perceived value 5 mean in that context?</p> <p>6 A. Is what they think that feature is 7 worth if they were to buy that piece of 8 equipment.</p> <p>9 Q. So value is what it would be worth 10 if they were going to buy the printer, which 11 is different from the assertion that actually 12 these people would in fact buy the printer. 13 Is that the point?</p> <p>14 A. That's right.</p> <p>15 Q. And is -- how about if it's some 16 other printers that's not the 300-dollar 17 model and not the hundred-dollar model; have 18 you formed an opinion as to what the 19 perceived value of the adaptive lighting 20 feature would be in some other printer?</p> <p>21 A. I think a rule of thumb would be 22 probably taking 17 percent of the price of 23 the equipment, and assessing that as the 24 value, since that seems to be the level it 25 came out for two printers at two different</p>	<p>Page 226</p> <p>1 McCullough 2 Q. Have you formed any opinion as to 3 whether people who have an HP printer are 4 likely to print more photos as a result of 5 having the adaptive lighting feature?</p> <p>6 A. I don't know that either way.</p> <p>7 Q. And so I take it the results of 8 your survey and, for that matter, the results 9 of the Jacoby survey do not provide a basis 10 to draw a conclusion on that question.</p> <p>11 A. That's correct.</p> <p>12 Q. Have you drawn -- formed any 13 opinion as to whether HP derives a benefit 14 from having the adaptive lighting feature 15 provided to people who own HP printers?</p> <p>16 A. I think just on the basis of the 17 fact that it has a perceived value of some -- 18 of some amount, that would basically say yes, 19 it does provide a benefit.</p> <p>20 Q. And have you formed any opinion as 21 to what's the -- how to quantify that benefit 22 to Hewlett-Packard?</p> <p>23 A. Nothing precisely, no. Just what I 24 volunteered in my report.</p> <p>25 Q. Nothing further on that subject.</p>
<p>1 McCullough 2 printers.</p> <p>3 Q. And have you formed an opinion as 4 to what would be the value, the perceived 5 value of customers of -- how -- of software, 6 of the opinion to buy stand-alone software 7 that contains an adaptive lighting feature?</p> <p>8 A. I have no opinion on that.</p> <p>9 Q. And how about have you formed an 10 opinion on what would be the value to 11 customers of receiving, or not -- not buying 12 specifically, but by any method obtaining 13 stand-alone software that has an inactive 14 lighting feature?</p> <p>15 A. My study doesn't give any 16 information about stand-alone software.</p> <p>17 Q. Have you formed any opinion as to 18 how often people who have the Hewlett-Packard 19 printers use the adaptive lighting feature?</p> <p>20 A. No.</p> <p>21 Q. Do the results of your survey and, 22 for that matter, the Jacoby survey give any 23 basis to draw a conclusion as to that 24 question?</p> <p>25 A. No.</p>	<p>Page 227</p> <p>1 McCullough 2 A. That's correct.</p> <p>3 Q. And so I take it the results of 4 your survey don't provide a basis to state 5 anything further to quantify that dollar 6 benefit.</p> <p>7 A. That's right.</p> <p>8 Q. And I -- and likewise, the Jacoby 9 survey that you've seen doesn't provide a 10 basis to quantify that benefit?</p> <p>11 A. That's also correct.</p> <p>12 Q. Your survey actually was conducted 13 in early 2008. Do you have any opinion as to 14 what perceived value was in 2002?</p> <p>15 A. I can't really know that, since I 16 didn't do the survey then.</p> <p>17 Q. Do you have any opinion as to what 18 HP as of 2002 should have or did believe was 19 the perceived value on the adaptive lighting 20 feature?</p> <p>21 A. I have no information about that at 22 all.</p> <p>23 Q. Have you formed any opinion as to 24 what your survey results tell us about a 25 negotiation between HP and Polaroid if there</p>

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<p>1 McCullough 2 had been one in 2002? 3 A. No. 4 Q. And the Jacoby survey, for that 5 matter, did those results, in your opinion, 6 tell us anything about the probabilities of a 7 negotiation between Hewlett-Packard and 8 Polaroid if there had been one in 2002? 9 A. No. 10 Q. Have you ever -- we've talked about 11 testimony that you've given on surveys. 12 Have you ever in any case given 13 testimony about quantifying damages? 14 A. No. 15 Q. Have you ever -- and to be 16 specific, have you ever given testimony about 17 what would be a reasonable royalty in a case 18 seeking damages for patent infringement? 19 A. No. 20 Q. And you don't have any opinion on 21 what the reasonable royalty would be in this 22 case? 23 A. That's correct, I do not. 24 Q. And just to say something that I 25 think is obvious, you obviously have not</p>	<p>Page 230</p> <p>1 McCullough 2 that counsel would ask for me later on, but I 3 can't anticipate that. 4 Q. Do you have a -- I heard you 5 explain that the raw data file that we 6 provided to you, you said had two fifty in 7 it. Do you have any other reason for 8 suggesting that that's not a correct file? 9 A. No. I just know -- I know there 10 are a hundred ninety respondents, and that's 11 I think two forty nine. You said two fifty; 12 I think it's two forty nine. But I have no 13 other reason to suspect it's wrong. 14 But like you raised some issues 15 before about do I know there's a difference 16 between men and women, et cetera, and if 17 counsel asked me at some point to investigate 18 that, I'd rather have, you know, the complete 19 file, the accurate file, as opposed to one I 20 don't. They may not. 21 Q. (Speaking simultaneously). 22 A. That's one reason. 23 Q. Pardon me. 24 A. Sure. 25 Q. The nature of my question is -- I</p>
<p>1 McCullough 2 formed opinions on the subject of whether 3 Hewlett-Packard infringed or whether the 4 patent was valid, or subjects of that 5 technical nature. 6 A. That's correct. 7 Q. Have you ever asked -- in any case 8 have you ever been asked to design a survey 9 that goes to the question of how the patent 10 owner and the alleged infringer would 11 negotiate royalties as between them? 12 A. No. 13 Q. Now, have I now heard all of the 14 opinions that you formed to date in this 15 case? 16 A. All the ones that I can recall at 17 this point in time. I would at some point 18 like to have the opportunity to have a 19 corrected file of the respondents so that I 20 can possibly -- I'm not sure I will do 21 anything with, it but at least in case I'm 22 asking to do something, to look at the one 23 ninety respondents, that I would have a file 24 for that, and not the file that I have, which 25 has 249 on it, and I may reach some opinions</p>	<p>Page 231</p> <p>1 McCullough 2 understood what you were pointing to as what 3 you would perceive as an anomaly in the 4 number -- 5 A. Yeah. 6 Q. -- but do you have any reason to 7 think that what we provided to you is not the 8 correct file? 9 A. I do not have any reason to suspect 10 that. 11 Q. As we are sitting here today, do 12 you have any plans to undertake any other 13 investigation in the case besides the things 14 that you've told me so far? 15 A. Nothing, unless counsel brings up 16 some things they want me to look into that 17 I've not been told about yet. 18 Q. So nothing yet. 19 A. Nothing at this point, no. 20 MR. BUCHANAN: Counsel, I'm going 21 to conclude my questioning for today. 22 As I said earlier in the morning, it 23 will be HP's position that the data on 24 the camera survey should have been 25 included in Mr. McCullough's report and</p>

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<p>Page 234</p> <p>1 McCullough 2 provided since, and I understood your 3 position, so it will be our position 4 that those things should be provided, 5 and the deposition reopened thereafter. 6 But we'll take that up in the 7 appropriate fashion at some other time. 8 MS. KINGSBURY: Okay. I have a 9 couple of follow-up questions, if I may.</p> <p>10 EXAMINATION BY 11 MS. KINGSBURY: :</p> <p>12 Q. Mr. McCullough, one of the things 13 you've talked about with Mr. Buchanan was 14 about the respondents that you did not 15 include in your report because, for instance, 16 they had said that the feature was -- that 17 the printer without the feature -- 18 MS. KINGSBURY: Strike that. 19 Q. Mr. Buchanan had asked you earlier 20 why you disqualify certain respondents. In 21 particular there were some respondents that 22 seemed to think that the value of the printer 23 once the feature had been removed was 24 somewhere between ten and twenty dollars, a 25 very small amount. If instead you had</p>	<p>Page 236</p> <p>1 McCullough 2 A. Right. 3 Q. Another thing Mr. Buchanan asked 4 you was why you didn't pose the question of 5 your survey as what is the value to you as a 6 respondent, and in response it's my 7 understanding that you said that you did pose 8 that question but in a better way. Can you 9 explain that? 10 A. I think an easier way for a 11 consumer at least to come up with that type 12 of information is to start with a base of 13 saying here's a printer that has a feature, 14 and this is what the feature is, and this is 15 what it does, et cetera, and then to ask them 16 if I were to remove -- if I had a printer 17 that did not have this feature, how much less 18 do you think that that would -- that would -- 19 that would cost; how much of a price do you 20 think that would be. I think that's an 21 easier way for people to relate to that 22 issue, rather than just abstractly saying 23 what's the value of that feature to you. 24 Q. Another question Mr. Buchanan asked 25 you is why in your survey, when respondents</p>
<p>Page 235</p> <p>1 McCullough 2 excluded anyone who thought the feature cost 3 \$50 or more, what impact, if any, would that 4 have had on the results? 5 A. Without going back, I can't be 6 precise about that, but I think it would have 7 a minimal effect on it, maybe no effect on 8 the median and probably a minimal effect on 9 the mean, but no substantive effect I can 10 think of. But it's easily calculated. 11 Q. Why do you believe that it would 12 have a minimal impact on the results by 13 removing that group of respondents? 14 A. Well, there aren't that many people 15 in that group, and there's a large sample 16 size, so reducing, taking out ten or fifteen 17 people out of the -- out of the calculation 18 is probably not going to have that much of an 19 effect on a base of around 400 and some-odd. 20 (Discussion off the record.) 21 Q. And just to clarify, when we're 22 talking about the \$50 or more, we're talking 23 about the more expensive printer -- 24 A. Yes. 25 Q. -- is that right?</p>	<p>Page 237</p> <p>1 McCullough 2 were asked about if the feature were removed, 3 you would provide -- 4 MS. KINGSBURY: Strike that. 5 Q. In the question that you asked in 6 your survey concerning what would happen if 7 the adaptive lighting feature was removed, 8 you provided two potential responses. One 9 was it would cost the same or it would cost 10 less. Mr. Buchanan asked you why you did not 11 also add the response would it cost more, and 12 in response you said that was silly. Can you 13 explain that. 14 A. Well, when you -- when you deal 15 with respondents, and you're trying to get 16 them to take a test seriously, you don't want 17 to give them a response category that seems 18 to be one which doesn't make any sense. It 19 causes them to feel like maybe it's -- you 20 know, you're not very serious about what 21 you're doing. So you try to avoid things. 22 You know, if you have -- if you have a 23 printer with a feature, and you say if I'm 24 going to remove that, it's almost illogical 25 to say it would cost more. And that's why I</p>

60 (Pages 234 to 237)

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<p style="text-align: right;">Page 238</p> <p>1 McCullough 2 didn't have it in there, so not to -- not to 3 make it sound silly. 4 Q. I'm looking at [McCullough] 5 Exhibit 6, which is your report, and 6 specifically I'm looking at Exhibit E, and 7 this is -- I'm looking at the last page of 8 the data on the C6 180 printer, which is a 9 page that Mr. Buchanan had had you look at 10 before. 11 A. Okay. 12 Q. Specifically the second column has 13 "DK," and you had identified for him that the 14 DK stood for don't know. 15 A. That's right. 16 Q. And I think he had asked you if 17 those people had in fact not been included as 18 respondents in your analysis. Is that right? 19 A. They're not in the mean or median, 20 correct. 21 Q. Okay. So they've not been factored 22 into your median. 23 A. Right. They're in the study, but 24 they're not in the -- they're not in the mean 25 or median.</p>	<p style="text-align: right;">Page 240</p> <p>1 McCullough 2 if people said it cost less and then said 3 they didn't know how much less, they still 4 didn't have the option to say, when asked 5 with the -- when provided with the card that 6 showed the ranges, they could still say don't 7 know. 8 A. Oh, absolutely. 9 Q. Okay. And if they did say don't 10 know, then their response was not calculated 11 into the median. 12 A. That's correct. 13 Q. Okay. Mr. Buchanan also asked you 14 why you didn't -- or asked you if you 15 analyzed whether men or women or different 16 ages in your survey (sic). Specifically, to 17 be a little more clear, he had asked you if 18 you had looked at how many more -- or how 19 women responded as compared to men, or 20 different age groups responded, and you had 21 responded no, is my understanding. Why 22 didn't you analyze that information? 23 A. Well, there was no particular 24 reason to do that. There's a lot of groups I 25 could have looked at. I could have looked at</p>
<p style="text-align: right;">Page 239</p> <p>1 McCullough 2 Q. Okay. And I just wanted to ask as 3 well, there's below, in the second column 4 after the "DK" that starts with "Costs less," 5 and then in the next column it says "Don't 6 know," and then again "Don't know," and then 7 the next column which is identified as value 8 used in mean or median, "NA"?</p> <p>9 A. Right.<p>10 Q. And I want to make sure I 11 understand what that represents.<p>12 A. All right you.<p>13 Q. Maybe you should just explain that 14 to me.<p>15 A. Yeah. These are seven respondents 16 that in question one said that they thought 17 it would cost less, but when we asked them in 18 the open-ended basis in question two how much 19 less, they said they didn't know, and then 20 again when we offered them the opportunity to 21 pick from one of the closed-end options, they 22 still said they didn't know. So these people 23 are also excluded from the mean and the 24 median.<p>25 Q. Okay. And so -- so I understand,</p></p></p></p></p></p>	<p style="text-align: right;">Page 241</p> <p>1 McCullough 2 different age groups. I could have looked at 3 different genders. But if there is no reason 4 to do that, then I would normally not do 5 that. It's an opportunity I would have if I 6 wanted to do it, but I just don't see any 7 reason why I would do that. 8 Q. Did you attempt in your survey to 9 address the potential of getting more females 10 than males? 11 A. Well, I actually -- by the 12 screening process, which I talked about 13 earlier, what that -- that screening process 14 where you -- you get people to answer the 15 screening questions in proportion to their 16 existence in the population in those six 17 groups, by setting up a screening criteria 18 like that, then the people who fall into your 19 study based on the qualifications fall in in 20 the proper proportion in terms of age and 21 sex. It's a technique I developed years ago, 22 which I think other people have copied since 23 then. 24 MS. KINGSBURY: Okay. I have no 25 further questions.</p>

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<p>Page 242</p> <p>1 McCullough 2 MR. BUCHANAN: I want to ask a 3 clarification about the clarification. 4 (Laughter.) 5 BY MR. BUCHANAN: 6 Q. On your report, Exhibit 6, counsel 7 asked you about Exhibit E and about responses 8 over \$50. 9 A. Right. 10 Q. Can you look at Exhibit E, and I'm 11 going to look at the fourth page of data on 12 Exhibit E. 13 A. (Perusing document) Fourth page. 14 Let me see. One, two, three, four. 15 Q. So this should be the page for the 16 HP Photosmart C6 180. 17 A. Right. 18 Q. And that's the price of a penny 19 less than \$300. 20 A. Right. 21 Q. So that's the more expensive of the 22 two printers. 23 A. Right. 24 Q. And do you see on this page is 25 where we begin with the numbers \$50?</p>	<p>Page 244</p> <p>1 McCullough 2 A. Correct. 3 Q. So let's look at the less expensive 4 printer. This is the -- let's begin with the 5 Officejet 5610 with a price, after rebate, of 6 a penny less than a hundred dollars. So on 7 the first page we have numbers of zero, Yes? 8 A. Okay. 9 Q. And the second page numbers of zero 10 running up to \$10. 11 A. Right. 12 Q. On the next page, third page, 13 numbers 10 to 15, yes? 14 A. Right. 15 Q. Fourth page numbers 15 to 20, yes? 16 A. Right. 17 Q. Fifth page, numbers 20 to 25. 18 A. Right. 19 Q. Sixth page, numbers 25 to 40. 20 A. Right. 21 Q. Seventh page, numbers 40 to 75. 22 And if we begin with 50, I'll just 23 count up how many there are here. I'll count 24 silently. I got a 39 on that page that had 25 \$50 or more. Does that sound right?</p>
<p>Page 243</p> <p>1 McCullough 2 A. Yes. 3 Q. Okay. So there's three pages 4 before this one with numbers less than \$50. 5 A. Right. 6 Q. And then after this one there's a 7 page five with numbers of \$50, yes? 8 A. Okay. 9 Q. And a page six with numbers of \$50 10 going up to a hundred, yes? 11 A. Right. 12 Q. And page seven of numbers of a 13 hundred dollars, yes? 14 A. Okay. 15 Q. And a page eight with numbers of a 16 hundred and higher. 17 A. Okay. 18 Q. So for this more expensive printer, 19 if you were to take out the numbers \$50 or 20 higher, that -- that would indeed change the 21 mean or the median, yes? 22 A. In this one it would, yes. 23 Q. And so when you said it wouldn't, 24 you were talking about the less expensive 25 printer.</p>	<p>Page 245</p> <p>1 McCullough 2 A. Right. 3 Was the question \$50 or more or 4 more than \$50? Just to be clear. 5 Q. Well, I'll ask about \$50 or more. 6 A. Okay. 7 If you took those out, is that what 8 you're asking about? 9 Q. Yes. 10 A. It would probably have -- again, as 11 I said, it would probably not have a dramatic 12 effect on the median. It might affect the 13 mean more, because it's easily calculatable. 14 I mean I just can't do it sitting here. But 15 it's not going to effect the mean -- it's not 16 going to affect the median very much, and it 17 might affect the mean a little bit, but it's 18 still going to be a value that's going to be 19 close to 20 bucks probably. But again, you 20 know, it needs to be calculated. 21 MR. BUCHANAN: Okay. I have 22 nothing further, Colby, at this time, 23 subject to what I said before. 24 MS. KINGSBURY: I have no further 25 questions.</p>

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<p>Page 246</p> <p>1 McCullough 2 THE VIDEOGRAPHER: Going off the 3 record. The time is 3:19 p.m. This is 4 the end of tape five and concludes this 5 deposition.</p> <p>6</p> <hr/> <p>7 WALTER J. McCULLOUGH</p> <p>8</p> <p>9 Subscribed and sworn to before me 10 this ____ day of _____, 2008.</p> <p>11</p> <hr/> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>Page 248</p> <p>1 I N D E X----- 2 WITNESS EXAMINATION BY PAGE 3 WALTER McCULLOUGH MR. BUCHANAN 5, 242 4 MS. KINGSBURY 234 5 ----- INFORMATION REQUESTS----- 6 REQUESTS: 7 23 Materials on cameras 8 ----- EXHIBITS----- 9 [McCULLOUGH] FOR ID. 10 [McCullough] Exhibit 1, Monroe Mendelsohn 11 Research, Inc. 2/1/08 invoice to Kirkland & 12 Ellis.....9 13 [McCullough] Exhibit 2, printout from 14 Internet on 2005 printer sales.....30 15 [McCullough] Exhibit 3, Monroe Mendelsohn 16 Research, Inc. 2/1/08 invoice to Polaroid 17 Corporation.....34 18 [McCullough] Exhibit 4, Monroe Mendelsohn 19 Research, Inc. 3/7/08 invoice to Polaroid 20 Corporation.....37 21 [McCullough] Exhibit 5, Monroe Mendelsohn 22 Research, Inc. 3/7/08 invoice to Polaroid 23 Corporation.....41 24</p> <p>25</p>
<p>Page 247</p> <p>1</p> <p>2 C E R T I F I C A T E</p> <p>3 STATE OF NEW YORK)</p> <p>4 : ss.</p> <p>5 COUNTY OF NEW YORK)</p> <p>6</p> <p>7 I, SHAUNA STOLTZ-LAURIE, a Notary</p> <p>8 Public within and for the State of New</p> <p>9 York, do hereby certify:</p> <p>10 That WALTER J. McCULLOUGH, the</p> <p>11 witness whose deposition is hereinbefore</p> <p>12 set forth, was duly sworn by me and that</p> <p>13 such deposition is a true record of the</p> <p>14 testimony given by the witness.</p> <p>15 I further certify that I am not</p> <p>16 related to any of the parties to this</p> <p>17 action by blood or marriage, and that I</p> <p>18 am in no way interested in the outcome</p> <p>19 of this matter.</p> <p>20 IN WITNESS WHEREOF, I have hereunto</p> <p>21 set my hand this 9th day of May, 2008.</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>Page 249</p> <p>1</p> <p>2 [McCullough] Exhibit 6, Walter McCullough</p> <p>3 March 2008 expert report.....42</p> <p>4 [McCullough] Exhibit 7, Monroe Mendelsohn</p> <p>5 Research, Inc. invoice to Polaroid.....54</p> <p>6 [McCullough] Exhibit 8, website printouts</p> <p>7 contained in Mr. McCullough's project</p> <p>8 folder.....71</p> <p>9 [McCullough] Exhibit 9, printouts from</p> <p>10 Internet.....77</p> <p>11 [McCullough] Exhibit 10, printout from</p> <p>12 Internet.....81</p> <p>13 [McCullough] Exhibit 11, printout from</p> <p>14 Internet.....82</p> <p>15 [McCullough] Exhibit 12, HP website printout</p> <p>16 from Mr. McCullough project folder.....83</p> <p>17 [McCullough] Exhibit 13, printout from HP</p> <p>18 website.....84</p> <p>19 [McCullough] Exhibit 14, Mr. McCullough</p> <p>20 expert report in Levi Strauss case.....122</p> <p>21 [McCullough] Exhibit 16, rebuttal expert</p> <p>22 report of Jacob Jacoby, Ph.D.....163</p> <p>23 [McCullough] Exhibit 17, survey report of</p> <p>24 Jacob Jacoby, Ph.D.....174</p> <p>25</p>

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1 *** ERRATA SHEET ***
2 ESQUIRE DEPOSITION SERVICES
3

4 NAME OF CASE: POLAROID v HP
5 DATE OF DEPOSITION: MAY 6, 2008
6 NAME OF WITNESS: WALTER J. McCULLOUGH

7 Reason codes:

- 8 1. To clarify the record.
9 2. To conform to the facts.
10 3. To correct transcription errors.

11 Page _____ Line _____ Reason _____
12 From _____ to _____

13 Page _____ Line _____ Reason _____
14 From _____ to _____

15 Page _____ Line _____ Reason _____
16 From _____ to _____

17 Page _____ Line _____ Reason _____
18 From _____ to _____

19 Page _____ Line _____ Reason _____
20 From _____ to _____

21 Page _____ Line _____ Reason _____
22 From _____ to _____

23
24
25 WALTER J. McCULLOUGH

Exhibit 2

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

POLAROID CORPORATION)	C.A. No. 06-738 (SLR)
)	
Plaintiff,)	
)	
v.)	
)	
HEWLETT-PACKARD COMPANY)	
)	
)	
Defendant.)	

DECLARATION OF WALTER MCCULLOUGH

I, Walter McCullough, declare as follows:

- 1) I am eighteen (18) years of age, I have never been convicted of a felony or crime of moral turpitude, and I am fully competent to make this declaration.
- 2) Based on my position with Ipsos Mendelsohn, I have personal knowledge of the facts stated herein.
- 3) I am the Chairman and CEO of Ipsos Mendelsohn Inc. (formerly Monroe Mendelsohn Research Inc.), a custom marketing, media and opinion research company located at 841 Broadway, New York, New York 10003-4704. Ipsos Mendelsohn is a member of the Council of American Survey Research Organizations (CASRO) and Council for Marketing and Opinion Research (CMOR), which are trade associations for the marketing research business, and I am personally a member of the American Marketing Association, American Statistical Association, and the American Association of Public Opinion Research (AAPOR).
- 4) I was retained by Kirkland & Ellis LLP, attorneys for Polaroid Corporation, to conduct a survey to design and conduct research to determine consumers' perceived value of

Hewlett-Packard's Adaptive Lighting Technology feature, which is used in printers and cameras. I conducted and presented a report on the survey results of the Photosmart C6180 printer, and the Officejet 5610 printers (the "Surveys"), and was deposed regarding that assignment.

5) Although I was originally asked to also conduct a survey on an HP camera, I was told by Polaroid's counsel to discontinue that survey. I have confirmed that the camera survey was conducted entirely separate from the printer surveys. While both camera and printer interviews were conducted in three of the eight interviewing locations, in those three locations the interviews were conducted as separate surveys among different respondents.

6) While it is true that this was the first time I had ever conducted a consumer valuation survey for litigation purposes, I have conducted thousands of surveys in the 40 years I have worked in the survey research field and many of them have related to the value consumers place on products. I have also conducted hundreds of surveys for litigation purposes. My opinions have been regularly accepted by the courts.

7) Based on my experience, I decided that respondents for these Surveys should be people who had purchased a color inkjet printer in the past year or who thought they might buy one in the next year. Respondents were selected from a representative pool of consumers who mirrored the gender and age makeup reflective of the population as determined by the US Census Bureau. Because the Surveys were focused on consumers' perception of the value of the feature and not on estimating manufacturing or wholesale cost, there was no reason to have greater skills or knowledge as a respondent. I did not seek out skilled respondents for the Surveys because the objective was not intended to survey experts. Nor were the respondents just random-selected retail shoppers.

8) I developed the definition of Adaptive Lighting that I used in the Surveys from different pages of HP's own website and not from random places on the Internet. In putting together the definition, I used HP's own words or made neutral slight adjustments. The bulk of the definition was taken from a webpage discussing cameras since I was originally asked to also do a camera survey. The goal was to put together a generalized description of Adaptive Lighting since this feature is available in a significant number of both cameras and printers. There would have been no benefit to limiting the definition to one used for the specific printers that were surveyed since the infringing feature is in many different HP printers and cameras. I wanted to use a constructive cohesive definition that consumers would understand.

9) Respondents were provided with a fact sheet showing the attributes of the particular surveyed printer. As part of the survey, respondents were told to consider a printer without the Adaptive Lighting feature, and then they were provided a full range of possible responses as to whether such a printer would cost less or the same without the Adaptive Lighting feature. When respondents were asked to value the printer without the Adaptive Lighting feature, there was no indication made to the respondents that the printers would not continue to have the other attributes listed on the fact sheet.

10) There was never an indication during the Surveys that respondents would not be asked similar questions about other features. Therefore, the survey questions did not suggest any specific answers from the respondents. But asking about the value of the remaining attributes in the printer was unnecessary because those attributes are not at issue in this case. Furthermore, it would be overwhelming and unreasonable to ask a consumer to put a value on each of the twenty or so attributes (or some portion thereof), and doing so would have been meaningless since the

objective of the survey was to determine the consumers' perceived value of the Adaptive Lighting feature — not to figure out the value of each feature.

11) Respondents who stated that the printer would cost less without the Adaptive Lighting feature were asked to value the printer without the Adaptive Lighting feature. Those who answered "I do not know" were provided a card with a closed-set of price ranges from which to select. It was entirely appropriate to offer closed-ended choices once a respondent was unable to decide how much less the printer would be without the Adaptive Lighting feature. Every experienced survey researcher knows that some respondents are reluctant to answer an open-ended question and would prefer a list of choices. Moreover, the ranges I provided, if anything, suggested numbers too low since the median for the Photosmart C6180 was \$50.00, the median for the Officejet 5610 printer was \$20.00, and the highest range respondents could choose for either printer was from only "\$20.00 or more." Respondents were also told at the very beginning of the survey that they could always say they did not know the answer to any of the survey questions asked.

12) If I had not included the information from the closed-ended responses in my calculations, it would have had very little impact on the overall survey results. Specifically, without the data from the closed-ended questions, the survey results would show that the medians of \$50.00 and \$20.00 would not change at all, and the means would actually increase to \$55.96 and \$24.89.

13) I do not believe it was necessary to use a filter question to weed out any respondents who did not feel qualified or capable to place a value on the Adaptive Lighting feature. Respondents were told they could always say they did not know the answer to a survey question at the beginning of the survey. Furthermore, the Surveys were attempting to measure

consumers' perceived value and not actual cost, so no particular qualifications were necessary to answer the survey questions.

14) In virtually all surveys, there are some respondents who either do not understand the task at hand or who provide unreasonable answers for some unknown reason. Survey experts, such as me, take this fact into account by excluding outlandish responses from the calculation of the means and median values. For instance, in the Officejet 5610 printer survey, two respondents said the Adaptive Lighting feature was worth \$200 even though the price of the printer was only \$99.99. I decided that those responses were unreasonable, and I excluded those results from his calculations. And to further minimize the influence of some particularly high values, I also calculated the median value (*i.e.* the middle most value) together with the mean. Some survey experts may have chosen to exclude more or less responses, but regardless, this would not alter the underlying fact that consumers believe that Adaptive Lighting has significant value.

I declare under the penalty of perjury that the foregoing is true and correct.

Dated this 11th day of June 2008.



Walter McCullough

Exhibit 3

**TO WHAT EXTENT DO CONSUMERS CONSIDER THE
“ADAPTIVE LIGHTING” FEATURE WHEN EVALUATING
AND
MAKING PURCHASE DECISIONS REGARDING
HEWLETT-PACKARD COLOR PRINTERS?©**

Prepared for:

Choate, Hall & Stewart, LLP

and

Fish & Richardson, P.C.

Prepared by:

**JACOB JACOBY, PH.D.
JACOB JACOBY RESEARCH, INC.**

April 2008

BACKGROUND AND OBJECTIVES

Background:

Hewlett-Packard Company (hereinafter referred to as "HP") is a company organized under the laws of Delaware, with its principal place of business in Palo Alto, California. HP is a leading manufacturer of computers and printers. Along with containing many other features, some of its color printers contain a feature referred to as Adaptive Lighting. It is my understanding that frequently this feature is not turned on and not used. Where it is turned on and used, this feature automatically adjusts high contrast photos to reveal the detail that would otherwise be lost in the shadows or in areas of very bright light.

Polaroid is a Delaware corporation, with its principal place of business in Waltham, MA. Polaroid has sued HP for alleged infringement of U.S. Patent No. 4,829,381. As I am informed, HP's "Adaptive Lighting" feature, where it includes a particular algorithm in Local Area Content Enhancement (LACE), is accused of infringing this patent.

My academic vita is provided in Appendix A. Also provided therein is a list of my publications of the last 10 years, a list of my courtroom and deposition testimony for the last four years, and a statement of the cost of this investigation.

Objectives:

Counsel for HP asked me to design and conduct research to determine the extent to which consumers rely on the Adaptive Lighting feature when evaluating and making purchasing decisions of HP color printers. This investigation addresses two key questions: (1) When gathering information prior to purchasing an HP color All-in-One or color printer, to what extent do consumers acquire information regarding the Adaptive Lighting feature? (2) For those who do acquire information regarding the Adaptive Lighting feature, how important do they feel this information is to their purchase decision relative to the other information they acquired? As described more fully below, this report describes the design, implementation and findings of that investigation.

6. The data were analyzed in accordance with accepted statistical principles;
7. The process was conducted so as to insure objectivity.

How the seven *Manual for Complex Litigation* factors were applied in the current investigation are discussed below.

My qualifications as a consumer researcher (an element of Factor #4) are set forth in Appendix A, entitled "Qualifications of Jacob Jacoby, Ph.D." Additional information may be obtained from JacobyResearch.com. Information regarding the principal subcontractor, Phi Power Communications, may be obtained from PhiPower.com.

As will be seen from this detailed report, the importance of objectivity (Factor #7) was observed throughout the design, implementation and interpretation of all aspects of the investigation.

FACTOR #1: *THE UNIVERSE (OR POPULATION)*

To be useful (and, in the case of litigation surveys, to be considered probative), the study needs to focus on "the proper respondents," namely, those whose state of mind is relevant. For purposes of the present study, the universe was defined as individuals, aged 18 and above, who said they had bought a color All-in-One printer or other color printer in the past 12 months, or said they might do so in the coming 12 months.

FACTOR #2: *THE SAMPLING PLAN*

Color All-in-One printers and other color printers are designed to operate in connection with computers and the vast majority of individuals who have

CERTIFICATION

Pursuant to 28 U.S.C. Paragraph 1746, I declare that, to the best of my knowledge and belief, the foregoing is true and correct.

Executed on:

April 17, 2008

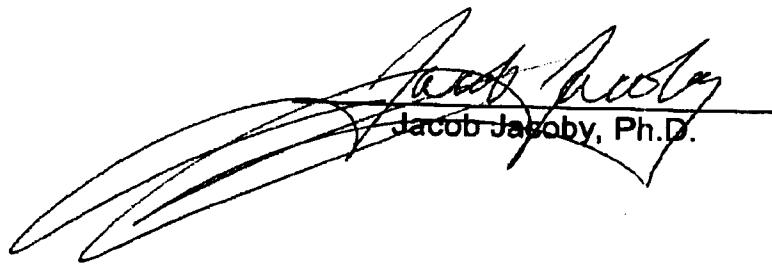

Jacob Jacoby
Jacob Jacoby, Ph.D.

Exhibit 4

JACOB JACOBY, Ph.D., MAY 1, 2008

Page 1

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

POLAROID CORPORATION,

Plaintiff,

vs.

No. 6-738 (SLR)

HEWLETT-PACKARD COMPANY,

Defendant.

-----)

VIDEOTAPED DEPOSITION OF

JACOB JACOBY, Ph.D.

New York, New York

Thursday, May 1, 2008

Reported by:
SHAUNA STOLTZ-LAURIE
CSR NO. 810490
JOB NO. 202736

ESQUIRE DEPOSITION SERVICES - CHICAGO
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JACOB JACOBY, Ph.D., MAY 1, 2008

Page 7

1 Jacoby

2 is ambiguous, would you also try to let me
3 know that?

4 A. Certainly.

5 Q. If there's a question that I ask
6 that requires more information before you
7 answer, will you try to tell me what
8 information you need so that you can answer
9 the question?

10 A. Yes.

11 Q. Is there any reason that you are
12 unable today to give full and complete
13 testimony?

14 A. None that I know of.

15 Q. And will you do your best today to
16 provide me with full and compete answers to
17 my questions?

18 A. Certainly.

19 Q. Dr. Jacoby, I understand that you
20 presented several reports in this matter, and
21 I just want to ask, generally speaking, is
22 the survey that you prepared considered to be
23 a consumer perception survey?

24 A. Not really.

25 Q. What is a consumer perception

JACOB JACOBY, Ph.D., MAY 1, 2008

Page 8

1 Jacob
2 survey?

3 A. It depends on the person who's
4 defining it that way. Perception is how you
5 perceive the outside world, how -- what you
6 interpret from the outside world. It's the
7 incoming sensation combined with what's in
8 your mind to interpret that incoming
9 sensation. Some people have used "consumer
10 perception" more broadly to include other
11 things in as well.

12 In contrast, the study that I did
13 first and foremost is a behavioral study. It
14 looks at what information people pay
15 attention to.

16 Q. How many times have you been asked
17 -- excuse me. How many times have you been
18 retained as an expert witness to provide --
19 to provide a behavior --

20 I'm sorry, what was it again?

21 A. A behavioral study.

22 Is that your question?

23 Q. Let me ask you again. How many
24 times have you been retained as an expert
25 witness to provide a behavioral study?

JACOB JACOBY, Ph.D., MAY 1, 2008

Page 9

1 Jacoby

2 A. I believe this may be the first
3 time that I've looked at the behavior of
4 individuals in acquiring information.

5 Q. To your knowledge, Dr. Jacoby, has
6 a court ever refused to qualify you as an
7 expert?

8 A. None.

9 Q. To your knowledge, has a court ever
10 declined to rely upon your testimony or your
11 evidence?

12 A. Yes.

13 Q. Can you tell me which of those
14 cases you remember?

15 A. Yes. One was actually in your
16 circuit, the Seventh Circuit. It was a court
17 -- a case in the Eastern District. It was
18 the National Football League Properties, Inc.
19 and Green Bay Packers versus Prostyle,
20 P-r-o-s-t-y-l-e, one word, and Sherry Tanner
21 I believe was her last name, T-a-n-n-e-r.

22 Q. And you're saying Sherry Tanner was
23 also a defendant in that case?

24 A. Yes.

25 Q. Do you know what happened in that

JACOB JACOBY, Ph.D., MAY 1, 2008

Page 10

1 Jacoby

2 case, as to why your testimony was
3 disqualified?

4 A. Yes, I do know why. Opposing
5 counsel lodged -- lodged five criticisms.
6 The court rejected four, excepted one, which
7 was contrary to what other most other courts
8 had accepted, and said based on that, we're
9 not going to accept the study.

10 Q. Do you remember what that criticism
11 was --

12 A. Sure.

13 Q. -- that the court excepted?

14 A. The court -- in fact, I can send
15 you to an article which covers the whole
16 thing in great detail in the 2006 Cardoso law
17 journal. It was on measuring sponsorship
18 confusion. The court said that the question
19 I asked respondents was "Do you think" --
20 essentially it was this: "Do you think party
21 B needed permission from party A or from
22 anyone to get -- to come out with this
23 product," and the court said I should have
24 asked "Did party B get permission," and had I
25 asked that question, it would have been a

JACOB JACOBY, Ph.D., MAY 1, 2008

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1 Jacob

2 violation of Daubert, because no lay consumer
3 knows whether or not Party B did or did not
4 get permission, and any answer to that would
5 be a guess, yet the court -- that was the
6 court's opinion.

7 MR. BUCHANAN: I noticed a ground
8 rule problem right at the beginning of
9 that question. I happened to notice
10 that as counsel was asking her question
11 you began your answer before she was
12 finished, so if you'll forgive me, let
13 me just remind everybody to talk one at
14 a time so that we can have a record.

15 THE WITNESS: Will do. Thank you
16 for noticing that.

17 MS. KINGSBURY: Thanks, Bob.

18 Q. Do you recall any other cases where
19 the court declined to rely upon your
20 testimony or evidence in a case?

21 A. Yeah. Recent case, Louis Vitton
22 versus Dooney & Bourke, and Kargo, K-a-r-g-o,
23 versus Advance.

24 Q. Can you tell me why your testimony
25 was disqualified Louis Vitton versus Dooney &

JACOB JACOBY, Ph.D., MAY 1, 2008

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1 Jacob

2 Bourke?

3 A. Yeah. The court -- the -- the --
4 there was -- there was a mistake in the
5 survey. It was supposed to test four Louis
6 Vuitton handbags. As it turned out only two
7 handbags were tested. I was provided by my
8 subcontractor with the aggregate data.
9 Didn't realize this until at the deposition.
10 The court basically said, you know, that was
11 a mistake; you were supposed to test four.
12 It didn't matter that all four, each and
13 every one of them, had the same design, and
14 it was the design at issue, not the shape of
15 the handbags or anything like that, and I was
16 chastised for submitting a report that didn't
17 correspond to what was done. Of course at
18 the time I submitted it I thought that was
19 what was done.

20 And the courts also used the same
21 criticism that the Prostyle court had looked
22 at, and again, completely opposite to what 30
23 or more courts, including Judge Posner in
24 appeal on the 7th Circuit, had ruled. So,
25 you know, when the courts resolve the issue,

JACOB JACOBY, Ph.D., MAY 1, 2008

Page 13

1 Jacob

2 witnesses such as myself won't be at the
3 mercy of a court that wanted to go one way,
4 contrary to the way in which most other
5 courts have gone.

6 Q. Can you tell me what happened on
7 the Kargo versus Advance case?

8 A. Yes. Over there the court had
9 essentially two criticisms of the survey I
10 did. One was that it wasn't close enough to
11 the real world, the scenario tested, and the
12 court is correct, was correct, very correct.
13 What we did is the best we could with the
14 stimuli we had under the circumstances, and
15 the court said it wasn't good enough.

16 The second essential criticism was
17 we used closed end questions, which is
18 something that I don't agree with.

19 Q. Do you recall any other cases in
20 which your testimony was disqualified?

21 A. As I sit here now none occur to me,
22 no.

23 Q. I'd like to talk to you a little
24 bit about surveys generally.

25 A. Um-hm.

JACOB JACOBY, Ph.D., MAY 1, 2008
2221449

1 Jacoby

2 MR. BUCHANAN: I have no further
3 questions.

4 MS. KINGSBURY: Thank you again.

5 THE WITNESS: Thank you both.

6 THE VIDEOGRAPHER: The time is
7 2:48 p.m. This marks the end of the
8 videotaped deposition of Mr. Jacoby.9 ~~Jacob Jacoby~~
10 JACOB JACOBY, Ph.D.11 Subscribed and sworn to before me
12 this 12th day of May, 2008.13 *Sheryl D. Limpert*14
15 SHERYL D. LIMPERT
16 Notary Public State of New York
17 No. 01L15072374
18 Qualified in New York County
19 Commission Expires Jan. 27, 2011

Exhibit 5

REDACTED

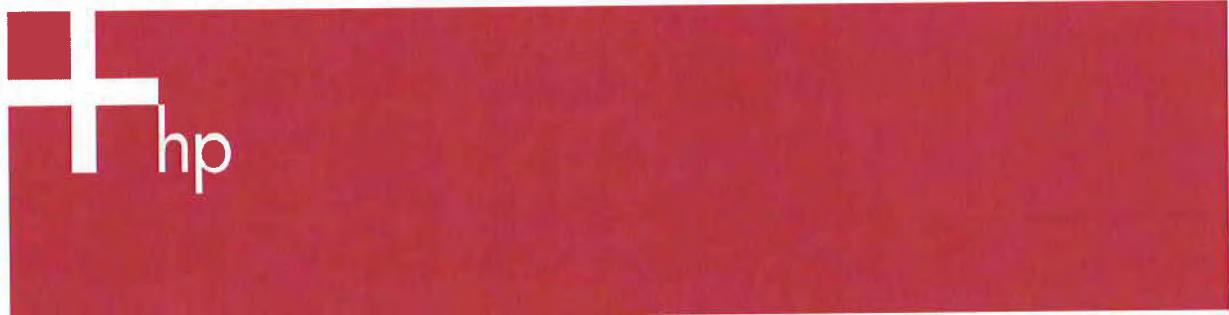
Exhibit 6

REDACTED

Exhibit 7

HP Photosmart 945 digital camera

Technology Background | HP Adaptive Lighting Technology

**What is HP Adaptive Lighting Technology?**

HP Adaptive Lighting Technology is a breakthrough technology that permits digital cameras to produce photos that look more like what we see with our own eyes. It balances brightness relationships between bright and dark areas in a photo, preserving gentle contrasts but compressing harsh contrasts. In doing so, some local areas in a photo are lightened and other areas are left alone.

Professional photographers sometimes do this by hand in the silver halide darkroom by "burning and dodging." Image scientists call this "adaptive scene re-lighting", or digitally adjusting the various sources of light that illuminate a scene.

This exclusive HP Adaptive Lighting Technology is included in PS945 camera's digital flash feature and can be switched "low", "high" and "off" based on user and reviewer needs. By default, this feature is turned off.

Because some dark areas of a scene can become lighter, this feature is called "Digital Flash" in PS945 camera menus. The exclusive HP technology (patents pending) is called "HP Adaptive Lighting Technology".

Do other cameras do anything like this?

No, the PS945 is the world's first camera to do this.

Has anything like this been done before?

Digital silver-halide photofinishing machines produced by Kodak and Fuji contain proprietary technologies that yield some of the benefits of HP Adaptive Lighting Technology. However, these algorithms have not been incorporated into digital cameras sold by either company.

There are several PC software applications that claim to do similar things. However, once a photo has been processed and compressed into a JPEG file, much of the picture information needed to effectively do processing has been lost. This is one reason why HP Adaptive Lighting Technology and similar technologies work best when performed inside a digital camera.



HP adaptive lighting Technology Tour

http://www.hp.com/united-states/consumer/digital_photography/tours/adaptive_lighting/index_f1.html?jumpid=reg_R1002_USEN

Camera Glossary

Adaptive lighting technology – An HP Real Life technology that automatically balances highlights and shadows in high-contrast photos to bring details (such as faces) out of shadows while preserving detail in brightly lit areas.

Adaptive lighting bracketing – An HP Real Life technology that creates three versions of a photograph: one with adaptive lighting turned off, one with adaptive lighting on low, and one with adaptive lighting on high.

Printer Glossary

Adaptive Lighting - Image enhancement to enhance detail in shadow areas or areas that are too light or overexposed.

Easy product comparison chart: HP Photosmart All-in-Ones

http://www.hp.com/united-states/consumer/digital_photography/comp_chart/all_in_ones.html?jumpid=reg_R1002_USEN

Adaptive lighting technology balances relationships between bright and dark areas in a photo, preserving gentle contrasts by smoothing out harsh contrasts.



No
adaptive
lighting

With
adaptive
lighting

How does this relate to Preferred Photographic Reproduction?

Inside the PS945 camera, HP Adaptive Lighting Technology processing is carefully coordinated with Preferred Photographic Reproduction so that PPR operates in an optimal fashion.

Did HP invent this technology?

HP researchers skilled in image and color science found new ways to dramatically improve a widely known algorithm and have filed numerous patent applications to protect these discoveries.

The first digital HP Adaptive Lighting Technology algorithm was described in a 1983 patent issued to Polaroid Corporation ("RETINEX"). This patent has since expired. The algorithm described in this patent did not work very well, but it did serve as the starting point for HP's improvements.

What types of photos benefit the most from HP Adaptive Lighting Technology processing?

Photos of scenes that have a lot of contrast benefit the most. These include outdoor scenes in a mixture of sun and shade, cloudy days when there is a lot of "glare" from the sky, and indoor flash photography.

It is especially difficult to get pleasing photos with flash photography, because light from the camera's flash brightly shines on subjects close to the camera, but dimly lights subjects far from the camera. Professional photographers call this problem "inverse-square light falloff."

HP Adaptive Lighting Technology processing balances much of these brightness differences to produce more natural and pleasing photos.

A good time to use HP Adaptive Lighting Technology on the low setting is when taking photos at a gathering of family or friends and you want to get pleasing photos without paying much attention to the act of taking photos. The algorithm improves photos taken under many difficult lighting conditions and results in more photos that are worth keeping and sharing.

Show me!

Here is one of the first before and after comparisons made with HP Adaptive Lighting Technology processing in an HP digital camera. The photographs were taken on a dark, cloudy day. With HP Adaptive Lighting Technology processing, large dark areas such as the statue appear brighter.

Figure 1.1

Without HP Adaptive Lighting Technology



With HP Adaptive Lighting Technology



Contrast Mask



The Contrast Mask photo shows the "burning and dodging" map calculated by the algorithm.

The bright areas in the mask will be lightened the most. Dark areas will be left alone.

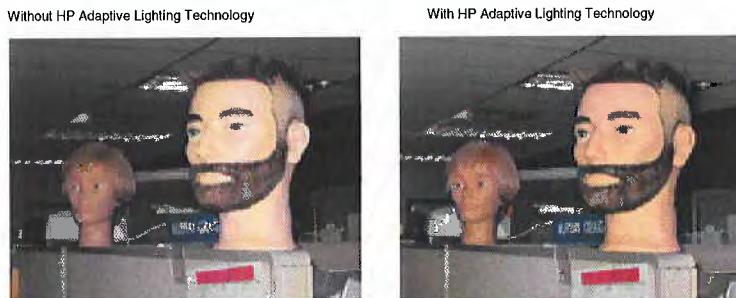
Figure 1.2



In other words, HP Adaptive Lighting Technology calculates a mask which it combines with the original to form the final image.

In the next pair of photos we see how HP Adaptive Lighting Technology balances the light with flash photography.

Figure 1.3

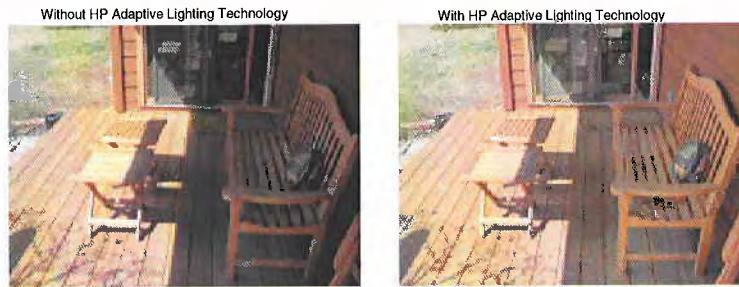


In the photo without HP Adaptive Lighting Technology, the mannequin closer to the camera flash is brighter than the one farther away. This happens because the light from a camera flash dims according to the square of the distance to the subject; a subject twice as far away receives only one quarter as much light.

In the photo with HP Adaptive Lighting Technology, the two mannequins appear more natural and are much more similar in brightness.

A very difficult photographic situation is photography in a mixture of sun and shade. In the following pair of photographs we see how HP Adaptive Lighting Technology is able to balance light between sun and shade. Imagine how useful this would be at a family picnic.

Figure 1.4



What is the difference between the high and low settings?

For most types of scenes the low setting would be preferred. In this setting, the algorithm balances lighting on a scene with a conservative touch that is unlikely to make photos look worse.

The high setting is most useful under conditions of extreme backlighting, or when you want a dramatic effect.

Will all photos look dramatically different?

HP's HP Adaptive Lighting Technology adjusts the strength of processing for each individual scene. Sometimes the effect will be very mild.

When should I not use HP Adaptive Lighting Technology?

There are a few types of scenes for which HP Adaptive Lighting Technology may not be desirable. These include times when you want dramatic contrasts in a photo, such as a silhouette. Low contrast scenes, such as delicate outlines of objects in a fog bank, do not benefit.

When making 8x10 or larger prints, some parts of a photo may appear to have more noise. With digital photography, dark parts of the scene will contain more noise than light areas. Because HP Adaptive Lighting Technology lightens some of these dark areas, you may notice more noise in these parts of the picture.

Reviewers need to know that...

HP Adaptive Lighting Technology processing extends the time needed by the camera to save a photo to the Secure Digital memory card. For this reason, HP Adaptive Lighting Technology is not turned on as a default. Turn off Digital Flash before timing camera performance.

Turn off Digital Flash when measuring color accuracy, contrast or signal/noise. When printing HP Adaptive Lighting Technology photos on an HP inkjet printer, turn off the printer's Digital Photography enhancements.

Avoid setting the camera to high sharpness and high contrast as both of these make noise more visible. High contrast also works against HP Adaptive Lighting Technology processing.

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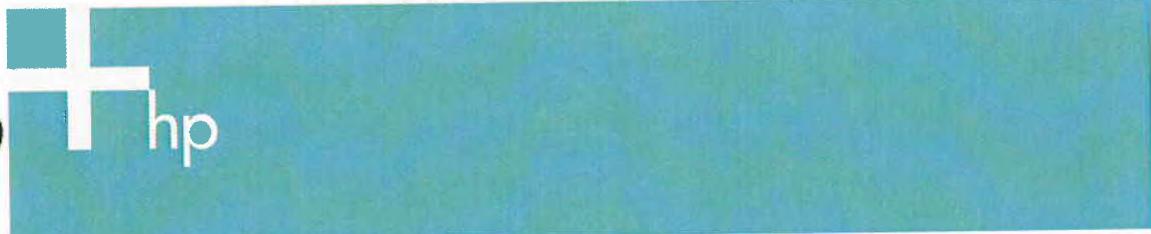
06/2003



HP Digital Cameras

- Technology Backgrounder -

HP Adaptive Lighting Technology – HP Real Life technologies™



What is HP Adaptive Lighting Technology?

HP Adaptive Lighting technology is a breakthrough technology that permits HP digital cameras to produce photos that look more like what we see with our own eyes. The human visual system, our eyes and brains working together, have a marvelous ability to deal with very high contrast scenes without losing information in either shadows or bright areas. The photographic process, either digital or film based, is much more limited in this regard. Photographers have long used techniques such as fill flash, fill lighting and darkroom techniques such as dodging and burning to address this challenge. HP's Adaptive Lighting technology uses advanced digital image processing to achieve the same effect, automatically and in the camera. HP Adaptive Lighting technology balances brightness relationships between bright and dark areas in a photo, preserving gentle contrasts but compressing harsh contrasts. In doing so, some local areas in a photo are lightened while other areas are left alone. Image scientists call this process "adaptive scene re-lighting", but only HP does this in camera.

HP Adaptive Lighting technology is included in newer Photosmart digital cameras and can be set to "low", "high" and "off" based on the photographer's desires. By default, this feature is turned off, however the camera can be set to power on with any of the three levels as the default. The current level is indicated by a symbol on the LCD display or in the Electronic View Finder (EVF) if equipped.

Do other cameras do anything like this?

The HP Photosmart 945 was the world's first and only camera to do this. HP Adaptive Lighting technology is now included in the HP Photosmart R707 digital camera.

POL 7522310



Show me!

Here is one of the first before and after comparisons made with HP Adaptive Lighting technology processing in an HP digital camera. The photographs were taken on a dark, cloudy day. With HP Adaptive Lighting technology processing, large dark areas such as the statue appear brighter.

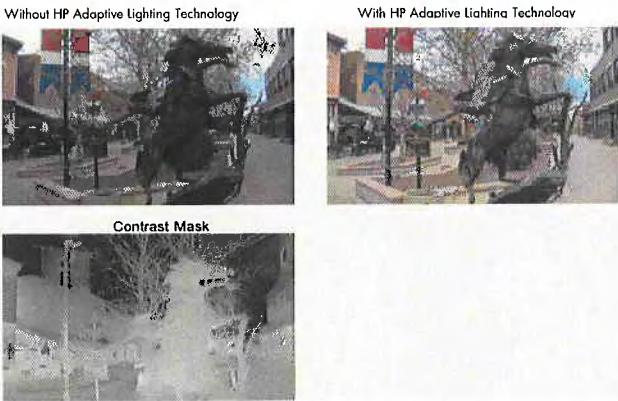


Figure 1.0: With and without HP Adaptive Lighting technology



Figure 2.0: HP Adaptive Lighting Technology contrast mask

In other words, HP Adaptive Lighting technology calculates a mask which it combines with the original to form the final image.

Has anything like this been done before?

The concept of scene re-lighting is not new. However, application of these advanced techniques is quite limited. Some digital silver-halide photofinishing machines contain proprietary technologies that yield some of the benefits of HP Adaptive Lighting technology. However, these algorithms have not been incorporated into digital cameras.

In addition, there are PC software applications that claim to do similar things. In the case of these software applications, the process must be manually applied by the user after the photograph is downloaded to a computer. However, once a photo has been processed and compressed into a JPEG file, much of the critical picture information needed to effectively do processing has been lost. In addition, HP Adaptive Lighting technology utilizes camera 'state' as well as specifies camera information to optimally process the image. This information is simply not available to a software package processing a stored image file.

The images on the next page show a photograph taken using an HP 945 camera with Adaptive Lighting off and then with Adaptive Lighting set to "high." The bottom image is the "Adaptive Lighting Off" image post processed by a software application intended to perform adaptive scene relighting. While the software processed image is certainly lighter, notice how the color and character of the sky has changed dramatically. The HP Adaptive Lighting technology image shows none of this undesirable effect. These photos illustrate a very difficult photographic situation is photography in a mixture of sun and shade. In the following pair of photographs we see how HP Adaptive Lighting technology is able to balance light between sun and shade. Imagine how useful this would be at a family picnic.

Fundamentally, the ability to perform digital adaptive scene re-lighting based upon just the stored image file will be limited by the amount of information available to the image processing routines.

Can't I just do this in an image editing package using tools like histograms, gamma curves and so on?

Not really. Tonal manipulation tools can be extremely useful and powerful tools. However, they operate globally over the entire image whereas HP Adaptive Lighting technology operates based upon an image dependent mask. A sophisticated user may be able to achieve some of the benefit of HP Adaptive Lighting technology in image editing packages by carefully making selections or masks then applying tonal correction using those masks. In addition, burning and dodging tools can selectively lighten or darken specific areas of an image much like the film photographer does in a darkroom.

However, while these techniques are possible, they are very difficult, time consuming and beyond the ability of most users. HP Adaptive Lighting technology operates automatically, in the camera, with no user interaction required (other than turning it on!)

Example images showing HP Adaptive Lighting technology as well as a competitive software package:

		
<p>Figure 3.0: HP Adaptive Lighting Technology – off</p> <p>Note: this is not a processed version of the above photo – rather an independent photograph taken with the camera after turning ADAPTIVE LIGHTING TECHNOLOGY on.</p>	<p>Figure 3.1: HP Adaptive Lighting Technology – high</p> <p>Note the dramatic improvement in details on the church – yet the sky and clouds are virtually unchanged.</p>	<p>Figure 3.2: Original ADAPTIVE LIGHTING TECHNOLOGY off image (above) post processed using a high quality software package.</p> <p>While the church has been lightened, (maybe too much), the sky has also significantly changed in color and character.</p>

Did HP invent this technology?

Yes and no. HP researchers skilled in image and color science found new ways to dramatically improve a widely known algorithm and have filed numerous patent applications to protect these discoveries.

The first digital scene re-lighting algorithm was described in a 1983 patent issued to Polaroid Corporation (RETINEX for "RETINa + cortEX"). This patent has since expired. The algorithm described in this patent did not work very well and was extremely compute intensive, but it did serve as the starting point for HP's improvements.

What types of photos benefit the most from HP Adaptive Lighting technology processing?

Photos of scenes that have a lot of contrast benefit the most. These include outdoor scenes in a mixture of sun and shade, cloudy days when there is a lot of "glare" from the sky, and indoor flash photography.

A good time to use HP Adaptive Lighting technology on the low setting is when taking photos at a gathering of family or friends and you want to get pleasing photos without paying much attention to the act of taking photos. The algorithm improves photos taken under many difficult lighting conditions and results in more photos that are worth keeping and sharing.

It is especially difficult to get pleasing photos with flash photography, because light from the camera's flash brightly shines on subjects close to the camera, but dimly lights subjects far from the camera. Professional photographers call this problem "inverse-square light falloff." HP Adaptive Lighting technology processing balances much of these brightness differences to produce more natural and pleasing photos. The images on the next page illustrate the advantage of Adaptive Lighting technology in a flash scene where the background is better revealed. Another very common problem flash scene is a flash photograph of people where some of the people are close to the camera and others are farther away. In this case, the

people close to the camera tend to be over exposed and those further away are dimly lit. Adaptive Lighting will help to balance the illumination and create a better photograph of both close and far subjects.

Note, HP Adaptive Lighting technology does not replace the flash – it simply works to make flash photography better.

Examples of flash photograph combined with HP Adaptive Lighting technology:

		
Figure 4.0: Indoor photo taken with strobe on, HP Adaptive Lighting technology off.	Figure 4.1: Same conditions as above, but with HP Adaptive Lighting technology set to the high setting. Notice how this photograph is much more like what a person would see in this environment.	Figure 4.2: Same conditions as above. Photograph taken with a competitive, high end, digital still camera - strobe on.

What is the difference between the high and low settings?

For most types of scenes the low setting would be preferred. In this setting, the algorithm balances lighting on a scene with a conservative touch that is unlikely to make photos look worse.

The high setting is most useful under conditions of extreme backlighting, or when you want a dramatic effect.

Will all photos look dramatically different?

HP's Adaptive Lighting technology adjusts the strength of processing for each individual scene. Sometimes the effect will be very mild, particularly in scenes where extremes of contrast do not exist.

When should I not use HP Adaptive Lighting Technology?

There are a few types of scenes for which HP Adaptive Lighting technology may not be desirable. These include times when you want dramatic contrasts in a photo, such as a silhouette. Low contrast scenes, such as delicate outlines of objects in a fog bank, do not benefit.

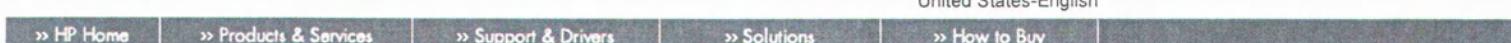
When making 8x10 or larger prints, some parts of a photo may appear to have more noise. With digital photography, dark parts of the scene will contain more noise than light areas. Because HP Adaptive Lighting technology lightens some of these dark areas, you may notice more noise in these parts of the picture. In general, the improvement in overall photo quality using Adaptive Lighting technology will offset slight increase in noise.

Reviewers need to know that...

HP Adaptive Lighting technology processing extends the time needed by the camera to save a photo to the Secure Digital memory card. For this reason, HP Adaptive Lighting technology is not turned on as a default. Turn off Adaptive Lighting before timing camera performance.

Turn off Adaptive Lighting when measuring color accuracy, contrast or signal/noise. When printing HP Adaptive Lighting technology photos on an HP inkjet printer, consider turning off the printer's Digital Photography enhancements.

Avoid setting the camera to high sharpness and high contrast as both of these make noise more visible. High contrast also works against HP Adaptive Lighting technology processing.



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HP adaptive lighting Technology Tour

Introduction

Exclusive HP adaptive lighting and adaptive lighting bracketing technology balances the contrast in an image and allows you to produce photos that look more like what you see with your own eyes.



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How It Works - Adaptive lighting for flash photos

You can also improve your flash photography with HP adaptive lighting. Your entire scene will appear more natural with a more even level of brightness in subjects close to the lens and further away.

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HP adaptive lighting Technology Tour

How It Works - Adaptive lighting bracketing

New R-Series HP digital cameras include adaptive lighting bracketing. When you turn it on and take a picture, adaptive lighting bracketing automatically creates three separate images; normal, adaptive lighting low, and adaptive lighting high.

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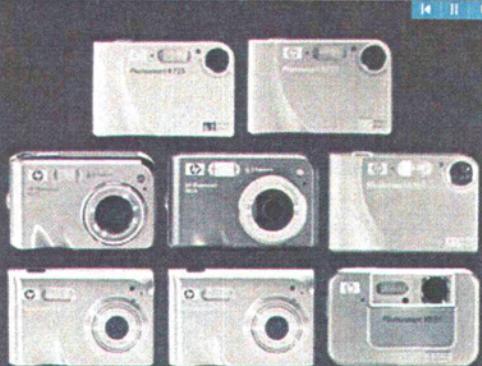
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Availability

HP adaptive lighting bracketing is available on the following sold HP Photosmart digital cameras: M737, R837, R847, R927, R937 and R967.

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HP Photosmart A520 Series Printer - Adjusting the Brightness, Contrast, and Exposure of an Image Using HP Photosmart Essential Software

Introduction

Use either the Adaptive Lighting or the Photo Fix feature to adjust the image. Adaptive Lighting improves the dark areas in an image without affecting the bright areas. You can also adjust the brightness, contrast, and exposure of an image using the Adaptive Lighting feature. Photo Fix adjusts the image automatically.

Adjusting the image

Adjusting the image using Adaptive lighting

1. Double-click the Photosmart Essential Software icon on the Desktop.
2. Click **Skip** on the **Welcome** screen.
3. Click **View Library**.
4. In the left panel, select the folder where your photos are stored.
5. In the **Selection tray**, double-click the image you want to edit. The image appears in the work area.
6. Click **Color and Light Tools** in the left panel to view the options.
7. Click **Adaptive Lighting**.
8. Wait for the computer to adjust the image and view the results. To remove the changes, click the **Undo Adaptive Lighting** button.

A copy of the original is stored as a digital negative in the computer for safe keeping.

Adjusting the image using Photo Fix

1. Double-click the Photosmart Essential Software icon on the Desktop.
2. Click **Skip** on the **Welcome** screen.
3. Click **View Library**.
4. In the left panel, select the folder where your photos are stored.
5. In the **Selection tray**, double-click the image you want to edit. The image appears in the work area.
6. Click **Photo Fix** in the top left panel.

7. Wait for the computer to adjust the image and view the results. To remove the changes, click the **Undo Photo Fix** button.

A copy of the original is stored as a digital negative in the computer for safe keeping.

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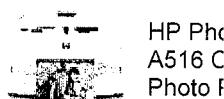
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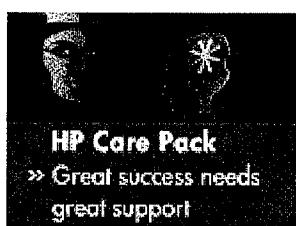
HP Smart Printing Features are designed to ensure you get the very most from your HP printer or HP All-in-One, helping you to achieve great results every time. HP-pioneered features benefit every stage of the printing process, from start to finish, and the intelligence that's built into HP printers or HP All-in-Ones puts real creativity at your fingertips.

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HP automatic red-eye removal



Never see red-eyes on your photos again with your HP printer or your HP All-in-One. Remove red-eyes with HP automatic redeye removal. This unique, easy-to-use and highly effective feature automatically recognises red eyes on your photos produced by a flash.



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After

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HP Adaptive Lighting technology



Get the light, right. This ground-breaking technology automatically adjusts high contrast photos to reveal the detail that would otherwise be lost in the

shadows. Ideal for images with extreme light/shadow contrast or after using a flash.



Before

After

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